SCH # 2018062002

Coyote Hills Restoration and Public Access Project

Final Environmental Impact Report:

Draft Environmental Impact Report Response to Comments Mitigation Monitoring and Reporting Program

CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA

East Bay Regional Park District

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1 INTRODUCTION

This Draft Environmental Impact Report (EIR) has been prepared to assess the potential environmental consequences of the proposed Coyote Hills Restoration and Public Access Project (also referred to as "the Proposed Project") in the northwest corner of the City of Fremont, California, east of Coyote Hills Regional Park and the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84.

This EIR analyzes and describes the potential environmental impacts of the Proposed Project, and identifies mitigation measures and alternatives that would avoid or reduce significant impacts. It also discusses significant unavoidable impacts that cannot be mitigated to a less-than-significant level. It is intended to inform decision makers, other agencies, and the public, of the Proposed Project.

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA). The East Bay Regional Park District (Park District, or EBRPD) is the lead agency for the Project. There are two responsible agencies with discretionary approval over certain elements of the Project: the City of Fremont and the Alameda County Flood Control and Water Conservation District. The Project will require permits for building, building demolition, reuse of an historic structure, picnic area if group picnic areas are proposed, grading, drainage, and stormwater management issued by the City of Fremont. Other City of Fremont review would include historic architectural review, discretionary design review if group picnic areas are proposed, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, and tree removal permits if street trees are affected.

The California Department of Fish and Wildlife (CDFW) and the San Francisco Bay Regional Water Quality Control Board (RWQCB) are also considered to be responsible agencies, as they have discretionary authority to authorize regulatory permits, and are granting agencies subject to CEQA review and comment.

The Alameda County Flood Control and Water Conservation District is responsible for implementing the flood control and wetland creation portions of the Project occurring in the Southern Wetlands Natural Unit. The Division of the State Architect and the State Historic Preservation Officer (SHPO) will review the EIR's findings on historic buildings, and the EIR also will be reviewed by the California Department of Fish and Wildlife, which acts as a Trustee Agency for biological resources.

This EIR is focused on the topics of Biological Resources, Cultural and Tribal Cultural Resources, and Transportation. All other environmental topics are evaluated in detail in an Initial Study in **Appendix A**, and are listed in **Section 1.3** of this document.

The documents incorporated by reference in this EIR are available for public review at Park District headquarters at 2950 Peralta Oaks Court, Oakland, California.

1.1 Proposed Action

The Coyote Hills Restoration and Public Access Project consists of two main actions: 1) approve a Land Use Plan for the 306-acre Park Expansion Area and add the Land Use Unit designations to the 2005 Coyote Hills Regional Park Land Use Plan (LUP) as an Amendment, 2) construct the elements of a Park Development Plan (see **Figures 3-3A** and **3-3B** in Chapter 3, Project Description).

Land Use Plan Amendment Unit Designations

Five Land Use Plan Amendment (LUPA) Unit Designations have been developed that reflect the five differing geographic areas within the Project Area, consistent with the designations used in the 2005 Coyote

Hills Regional Park LUP. Each of these five units has differing attributes and environmental conditions that warrant separate land use designations, management actions, and site development strategies. The Units are used to describe and stipulate proposed land uses, management actions and activities, and physical construction projects that would occur within each individual designation area. These Unit designations are: Natural Units, Recreational Units and a new Agricultural Unit.

The focus of Natural Units is wildlife habitat and native plant community management. Visitor serving facilities such as parking areas, restrooms, and picnic areas would be constructed in Recreation Units. Farming and grazing are the principal designated land uses in Agricultural Units. Grazing is also a permissible use in open grassy areas within Natural Units and Recreation Units. Also included in this designation are areas for repair and storage of farm equipment and machinery, and crop processing and storage, such as hay storage. Also specifically designated in Agricultural Units are farm stands for produce sale. Small trailhead and staging areas, public access trails, wildlife viewing platforms, and interpretive panels and displays are designated uses in both the Natural Units and Recreation Units. There may be sensitive resource areas within all of the units, such as special-status species occurrences or cultural resources. These would be managed separately and special protective measures may be used.

The five units of the Project are:

- Patterson Slough Natural Unit
- Western Wetlands Natural Unit
- Southern Wetlands Natural Unit
- Historic Patterson Ranch Farm Agricultural Unit
- Ranch Road Recreation Unit

Park Development Plan

The proposed Park Development Plan consists of eight elements:

- Habitat Restoration and Enhancement
- Recreation and Visitor-serving Facilities
- Public Access Trail Construction and Operation
- Cultural Resources Management
- Agricultural Land Uses and Associated Activity
- Surface Water and Groundwater Management,
- Utility Upgrades and Extensions
- Climate Change and Sea Level Rise

1.2 Planning Process

Project Background

The site of the proposed Coyote Hills Expansion Project is adjacent to the existing Coyote Hills Regional Park. It consists of lands donated to the Park District by descendants of the Patterson family who originally operated Patterson Ranch.

In 2016, the Park District contracted with a team of consultants lead by Questa Engineering, Inc. to prepare the Coyote Hills Restoration and Public Access Project evaluated in this EIR, which consists of the LUPA and Park Development Plan discussed above.

Adopted Park District goals and policies guided initial planning, formulation of project goals, objectives, scope, and evaluation of opportunities and constraints. Related plans, and applicable laws and regulations were also considered during the project formulation process. Planning for the Coyote Hills Restoration and Public Access Project included a community outreach and public participation process to gather input from the public, stakeholders and interested parties. To date, two public workshops and a CEQA scoping meeting have been held, as well as four public presentations before the Park District Board Executive Committee and full Board of Directors. At the two workshops, approximately 53 members of the public signed in and participated in review of documents, maps, and exhibits analyzing and evaluating site resources, existing conditions, and opportunities/constraints, prior to a review of concepts.

Public input received at these meetings was utilized in the development of the Land Use Plan Amendment and Park Development Plan. A goal of the public participation program, while affording opportunities for different interests to be involved, is to focus review in ways that emphasize the site-specific planning and provide participants the opportunity to understand Project concepts and to comment on issues and concerns to be considered in the Plan and EIR.

The Outreach Program included the following public meetings:

- ♦ Park District Board Executive Committee, July 6, 2017 (Review of Site Constraints and Opportunities)
- Public Workshop #1, August 14, 2017 (Review of Site Constraints and Opportunities)
- ♦ Park District Board Executive Committee, November 2, 2017 (Review of Draft Program Options)
- Public Workshop #2, November 13, 2017 (Review of Draft Program Options)
- Park District Board of Directors, February 20, 2018 (Approval of Conceptual Site Plan and Site Program)
- ♦ CEQA Notice of Preparation Scoping Meeting, May 31, 2018
- ♦ Native American Consultation (AB 52) April 26, 2018

Additional public meetings will follow as part of the EIR process.

Consultation with Resource Agencies

As the Proposed Project could affect environmental resources including wetland areas, the following agencies were contacted during Project planning: City of Fremont, Fremont Unified School District, Alameda County Mosquito Abatement District, Alameda County Water District, Alameda County Resource Conservation District, California Department of Fish and Wildlife, Eden Landing Wildlife Preserve, Don Edwards Wildlife Refuge, and Alameda County Flood Control and Water Conservation District.

1.3 Environmental Review Process

Initial Study

An Initial Study (IS) checklist was completed for the Proposed Project at the same time this EIR was prepared, and is included in **Appendix A**. The IS included a Project description and a detailed analysis of the following issues:

- ♦ Aesthetics
- ◆ Agriculture and Forest Resources
- ♦ Air Quality
- ♦ Biological Resources
- ♦ Cultural Resources

- ♦ Geology and Soils
- ♦ Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- ♦ Hydrology and Water Quality
- ♦ Land Use and Planning
- ♦ Mineral Resources
- ♦ Noise
- ◆ Population and Housing
- Public Services
- ♦ Recreation
- ♦ Transportation
- ◆ Tribal Cultural Resources
- Utilities and Service Systems

The IS concluded that, with mitigation measures identified in the IS, Project impacts would be reduced to a less-than-significant level in all issues except for:

- ♦ Biological Resources
- ♦ Cultural Resources
- ◆ Tribal Cultural Resources
- ♦ Transportation

Because there could be potentially significant impacts from the Proposed Project for the three issues listed above, an EIR was prepared to evaluate these three issues in more detail.

Notice of Preparation

A Notice of Preparation (NOP) of an EIR was published on May 14, 2018. This announced the date and venue for the public Scoping Meeting. The NOP described the environmental issues to be covered in the EIR and invited comments on the proposed EIR scope. The NOP was sent to the State Clearinghouse, as required under CEQA, and to approximately 200 interested parties. These included: government agencies with a responsibility or interest over the Proposed Project, non-governmental agencies (NGOs), parties requesting to be on the mailing list, and representatives of the Ohlone Tribe. The Park District also posted links to the NOP on its website.

Public Scoping Meeting

A public scoping meeting to describe the EIR process and to solicit comments on issues that should be covered in the EIR was held at the Board Room of the Park District headquarters in Oakland, on May 31, 2018.

Comments Received

Comments were received verbally at the Scoping Meeting and have been summarized for this EIR. Written comments received in the 30-day comment period following publication of the NOP are included, along with the summary of oral Scoping Meeting comments, in **Appendix B** of this EIR.

Draft EIR Availability

A copy of this Draft EIR has been sent to the State Clearinghouse and to those who requested a copy by responding to the NOP. It is also available for downloading from the Park District website at www.ebparks.org. Electronic copies are also available at the Fremont Main Library, 2400 Stevenson Boulevard, Fremont; and at the Centerville Library, 3801 Nicolet Avenue, Fremont.

Draft EIR Comments

This Draft EIR was published on March 7, 2019, which marks the start of the 45-day comment period as required under CEQA. Written comments should be received no later than 5 p.m. on April 22, 2019 and should be sent to:

Karla Cuero East Bay Regional Park District Acquisition Stewardship and Development Division 2950 Peralta Oaks Court PO Box 5381 Oakland, CA 94605 Comments can also be sent via email to kcuero@ebparks.org.

Comments should focus on the environmental impacts and the adequacy of the EIR. Section 15151 of the State *CEQA Guidelines* defines the standards for EIR adequacy as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a Proposed Project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR would summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.

Final EIR and Responses to Comments

All comments received within the comment period and pertaining to the environmental impacts and adequacy of the Draft EIR will be responded to in writing. CEQA does not require responses to comments on the project merits, or unsubstantiated comments. Responses, together with comment letters and emails, will be included in the Final EIR, along with any necessary revisions to the contents of the Draft EIR.

Final EIR Approval and Project Approval

The Final EIR will be made publicly available in the same manner as the Draft EIR. After publication of the Final EIR, the Park District Board of Directors will consider whether to certify the Final EIR, adopt findings, and approve the Project, after evaluating its merit.

The Park District meeting for EIR certification and Project approval will be a public hearing where additional comments may be received.

1.4 Report Organization

This EIR is organized into the following chapters:

• Chapter 1, Introduction. Chapter 1 provides background and an overview of this EIR document.

- Chapter 2, Report Summary. Chapter 2 is a synopsis of the Project description, required permits, environmental impacts of the Proposed Project, alternatives, and CEQA conclusions.
- Chapter 3, Project Description. Chapter 3 describes the Proposed Project.
- Chapter 4, Environmental Evaluation. Chapter 4 evaluates the potential environmental impacts of the Proposed Project.
- Chapter 5, Alternatives. Chapter 5 considers the No Project Alternative and three other Project alternatives, and identifies the "Environmentally Superior Alternative."
- Chapter 6, CEQA-Required Assessment Conclusions. Chapter 6 evaluates effects with regard to growth inducement, significant irreversible changes, cumulative impacts, and impacts found not to be significant.
- Chapter 7, Report Preparers. Identifies the preparers of the EIR.
- Appendices. Includes the Initial Study and other relevant background materials.

2 REPORT SUMMARY

This summary presents an overview of the analysis contained in this EIR. The chapter summarizes the following: 1) the Project under review, 2) areas of controversy, 3) significant impacts and mitigation measures, 4) unavoidable significant impacts, and 5) alternatives to the Project. Additional detail on the Proposed Project is provided in Chapter 3. Additional detail on the environmental impacts is provided in Chapter 4 and **Appendix A: Initial Study**. Alternatives are described and evaluated in Chapter 5.

2.1 Project Under Review

Location and Setting

The 306-acre Coyote Hills Restoration and Public Access Project area is the subject of the proposed restoration and public access Project. It is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84. The Expansion area borders on the east side of the existing Coyote Hills Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the north by the Alameda Creek Flood Control Channel (see **Figures 3-1 and 3-2**).

Project Characteristics

The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and development of the Expansion area proposed in this Project.

The proposed Park Development Plan has eight main elements (Figures 3-2, 3-3A, and 3-3B):

- 1) Habitat Restoration and Enhancement
- 2) Recreation and Visitor Serving Facilities
- 3) Public Access Trail Construction and Operation
- 4) Cultural Resources Management
- 5) Agricultural Land Uses and Associated Activity
- 6) Surface Water and Groundwater Management
- 7) Utility Upgrades and Extensions
- 8) Climate Change and Sea Level Rise

Required Permits and Approvals

As a California Special District, the Park District governs use and development of its park lands pursuant to Section 5541, 5558, 5559, 5560, and 5565 of the Public Resources Code of the State of California. Rules and park use regulations are codified in Park District Ordinance 38. It is estimated that permits and/or approvals could be required from up to twelve separate agencies. These are:

Federal Agencies

- U.S. Army Corps of Engineers Permits for any earthwork in jurisdictional wetland areas or over Waters of the U.S.
- ◆ U.S. Fish & Wildlife Service and National Marine Fisheries Service The Corps of Engineers may initiate consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act, for activities in wetlands/waters occupied by listed or protected species.

State Agencies

- ◆ Department of Fish and Wildlife Section 1600 Stream or Lakebed Alteration Agreement. Coordination and consultation may also be required for potential Project impacts on or within habitat areas occupied by protected or listed species covered under the California Endangered Species Act.
- ◆ San Francisco Bay Regional Water Quality Control Board (RWQCB) The Project may require Water Quality Certification under Section 401 of the Clean Water Act, Notice of Intent (NOI) for construction activity, and Waste Discharge Requirements (WDRs) if any wetlands or state and federal waters are impacted.

Regional Agencies

• Bay Area Air Quality Management District - Permit for construction work involving use of heavy equipment.

County and Local Agencies

- ♦ City of Fremont Implementation of elements of the park development plan may require: Conditional Use Permit (CUP) and discretionary design review, as needed for establishing a group picnic facility, Discretionary Design Review Permit for proposed site improvements, Historic Architectural Review for dismantling and removal of the Labor Contractors Residence and substantial revisions to the historic Arden Dairy Milk House, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, grading permit, stormwater management and drainage permit, building permits, including CALGreen compliance, tree removal permits if street trees are affected, review by the City Engineering Department and approval by the City's Floodplain Manager in the Engineering Department of any bridges over FEMA regulatory flood plains, and approval of Project Plans, Encroachment Permits and other construction agreements for improvements to or within the Patterson Ranch Road-Paseo Padre Parkway intersection and public road improvements.
- Alameda County Flood Control and Water Conservation District -- Review and agreement for Project Engineering Plans for all trails and structures on ACFCWCD lands.
- ◆ Alameda County Water District -- Coordination, permit applications and approval for destruction of abandoned wells, construction of any new well and/or repair of an existing well, deep piers for bridges and boardwalk structures or wildlife observation platforms, and extension of a domestic waterline from Paseo Padre Parkway.
- ♦ Alameda County Transit District -- Coordination with the Alameda County Transit District regarding transit routes in the Project vicinity, and/or adding a new bus stop/bus shelter along Paseo Padre Parkway and near the Park entry.
- Alameda County Environmental Health -- Permitting and coordination for abandonment and closure of any septic tank and leach fields associated with historic agricultural buildings.
- Union Sanitary District (USD) -- Annexation to the USD, permits for connection of park staging area restroom to the sanitary sewer main, specific approval for construction over USD force mains, and an Encroachment Permit for construction roads.

2.2 Areas of Controversy

The Proposed Project raises the following areas of potential controversy: historic architectural resources, archaeological resources including potential for buried Native American remains, preservation and protection of biological resources, access to the site for mosquito abatement, and alternative locations for trails and parking.

2.3 Significant Impacts and Mitigation Measures

Significant Impacts and Mitigation Measures are summarized in **Table 2-1**. This table contains all mitigation measures applicable to the Proposed Project, which include both mitigation measures identified in this EIR (for Biological Resources, Cultural and Tribal Cultural Resources, and Transportation), and mitigation measures identified in the Initial Study (all other mitigation measures). The Initial Study is included as **Appendix A**.

TABLE 2-1SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
AESTHETICS			
AGRICULTURE AND	ant Project or cumulative in	npacts related to Aesthetics; therefore, no mitigation measures are required.	
FOREST			
RESOURCES			
	ant Project or cumulative in	npacts related to Agriculture and Forest Resources; therefore, no mitigation measures are required.	
AIR QUALITY		1/2005 / 10/2006 10 2 12/ 10/2007 1 10/10/ 1 20/00/003, 10/07/9/10/ 10/2000/10/ 10/2000/ 10/2000/ 10/2000/	
Impact AIR -1:	PS	<u>Mitigation Measure AIR -1:</u> The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:	LTS
		1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.	
		2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.	
		3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.	
		4. All vehicle speeds on unpaved roads shall be limited to 15 mph.	
		5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.	
		6. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Park District's phone number shall also be visible to ensure compliance with applicable regulations.	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
BIOLOGICAL RESOURCES Impact BIO-1: The Project could have a substantial adverse effect, either directly or through habitat modifications and disturbance, on species identified as a candidate, sensitive, or Special Status species in local or regional plans policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	PS	 Mitigation Measure BIO-1a, Project-wide: General Conservation Measures to Protect Habitat for All Special Status Wildlife Species.: The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status wildlife species. Prior to conducting work and during work in sensitive biological communities and Special Status species habitats, including work within 100 feet of Patterson Slough, and within or near jurisdictional wetlands, the following measures will be implemented. A qualified, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) approved Biological Monitor (Qualified Biologist) shall be present to observe work and shall have the authority to halt work as necessary if permit conditions are being violated. Pre-construction biological surveys appropriate to Special Status wildlife species will be conducted by the Qualified Biologist prior to initiation of construction. Before any construction activities begin on the Project, the Qualified Biologist shall conduct a training session for construction workers, and Park personnel involved in construction of the Project. The training shall include a description of each Special Status species that might occur and their respective habitats, including wetlands, the general measures that are being implemented to protect each of the 	* LTS
		species as they relate to the Project, and the physical boundaries within which the Project shall be accomplished. The training should also provide instruction in the appropriate protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers.	
		• Before starting ground disturbing activities within construction areas, the Park District and its Construction Contractors shall clearly delineate the boundaries of the construction area with	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	0	fencing, stakes, or flags. Contractors shall be required to restrict construction-related activities to within the fenced, staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of construction-related activities in that area. Fencing stakes and flags shall be removed upon completion of construction work. Sensitive habitat areas, including Special Status wildlife species habitat and known populations, and jurisdictional wetlands, shall be clearly indicated on the Project construction plans.	
		• To prevent Special Status wildlife species from moving through the construction area, the Park District or its Construction Contractors shall install temporary wildlife exclusion fencing. Final fence design, including appropriate animal escape structures within the fencing and fence location, shall comply with permit conditions, as appropriate for each species being protected. Any construction-related disturbance outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval of the Qualified Biologist. New trails, bridges, or other structures shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Qualified Biologist.	
		• Where wildlife exclusion fencing is not installed and ground disturbing activity is occurring, the Qualified Biologist will approve the proposed disturbance in advance and clear the area prior to the start of ground disturbing activity.	
		• A USFWS-approved and/or CDFW-approved Biological Monitor should be on-site during installation of the fencing to	

^{*} Key: PS = potentially significant, LTS = less than significant, SU = significant and unavoidable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		any Special Status wildlife outside the construction area. The fencing shall be inspected by the qualified Biological Monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. After construction has been completed, the exclusion fencing shall be removed within 72 hours.	
		• Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Qualified Biologist or a qualified biologist working under their direction shall survey within the exclusion area to ensure that no Special Status species are present. The Qualified Biologist or a qualified biologist working under their direction shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of Special Status species.	
		• Excavated soils shall be stockpiled in disturbed areas lacking native vegetation, and/or as shown on the Construction Plans, or approved by the Qualified Biologist.	
		• All detected erosion caused by Project-related impacts (i.e., grading or clearing for new trails) and other improvements shall be remedied immediately upon discovery.	
		• The introduction of exotic plant species shall be avoided first through prevention, followed by physical or chemical methods. Construction equipment shall arrive at the Project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Weed-free rice straw or other certified weed free straw shall be used for erosion control. Earth-moving equipment, gravel, fill, or other materials will be weed-free. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		or other debris or seed-bearing material before entering the Park or from an area with known infestations of invasive plants and noxious weeds. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by the Qualified Biologist.	
		• Use of herbicides as vegetation control measures shall be used in compliance with the Park District's IPM policies and Best Management Practices (BMPs). All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation, as well as additional Project-related restrictions deemed necessary by the CDFW and/or USFWS, and included in the permit conditions. No rodenticides shall be used.	
		• The introduction of soil-borne pathogens shall be avoided by following the Park District's Pathogen Controls Best Management Practices.	
		• If Special Status wildlife species are found within or near construction areas during Project construction work, construction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the Project area (if possible). The wildlife resource agency(ies) with jurisdiction over the species shall be contacted regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the Qualified Biologist shall document the activities of the animal within the site; fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the Park District and the appropriate regulatory agency with jurisdiction over the wildlife species.	

^{*} Key: PS = potentially significant, LTS = less than significant, SU = significant and unavoidable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		 Uncommon or previously undocumented Special Status wildlife species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB). 	
		• Before steep-walled holes or trenches are back filled, they shall be inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted to determine the appropriate method for relocation.	
		• Construction pipes, culverts, or other structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for Special Status species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Special Status species is discovered inside a pipe, and does not move of its own accord, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.	
		• Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The Qualified Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	5	appropriate facility. If vehicle or equipment maintenance is necessary, it may be performed in the designated staging areas, as shown on the Construction Plans or approved by the Qualified Biologist.	
		• Temporarily disturbed areas shall be returned to pre-project conditions or better.	
		• Project-related vehicles should observe a 15-mile-per-hour speed limit on unpaved access roads within the limits of construction.	
		• Documentation of compliance, as required by any regulatory permit conditions, with applicable state and federal laws pertaining to the protection of Special Status wildlife and native and migratory birds and raptors shall be recorded in a daily monitoring report and made available to the CDFW as part of a post construction biological monitoring report.	
		Mitigation Measure BIO-1b, Project-wide: Prepare and Implement a Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and Jurisdictional Wetlands: The Park District shall implement the following mitigation measure to restore or compensate for habitat, including Special Status habitat and jurisdictional wetland areas disturbed or impacted by Project actions.	
		• To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for implementing the Plan. The Plan shall include by proportionate amounts, specific habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		riparian, willow sausal, seasonal wetlands, etc).	
		• To facilitate preparation of the Plan, the Park District shall, prior to construction, have a botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species.	
		Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species: The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status plants. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.	
		• A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for <i>Conducting and Reporting</i> <i>Botanical Inventories for Federally listed, Proposed and Candidate Plants</i> (USFWS, 2000) and CDFW <i>Guidelines for Assessing the Effects of</i> <i>Proposed Projects on Rare, Threatened, and Endangered Plants and</i> <i>Natural Communities</i> (CDFG, 2000). The Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results. and consultation with CDFW	
		Locations of Special Status plants in proposed construction	

^{*} Key: PS = potentially significant, LTS = less than significant, SU = significant and unavoidable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		areas will be recorded by the qualified Botanist using a global positioning system (GPS) unit, and flagged in the field. The GPS data will be used to create digital and hardcopy maps for distribution to construction inspectors and contractors to inform them of areas where disturbance is prohibited, or where activities are restricted.	
		• If initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species.	
		• Access may be restricted around Special Status plant populations through appropriate field direction by the Qualified Botanist. This may include signage, buffers, seasonal restrictions, and design or no access, depending on the Special Status species in question.	
		• The Park District and its Construction Contractors shall install a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any Qualified Botanist-required buffer areas to prevent encroachment by construction equipment and personnel. The Qualified Botanist will determine the exact location of the fencing. The fencing will be strung tightly on posts set at maximum intervals of 10 feet (3 meters), and will be checked and maintained weekly until all construction is complete in the area where Special Status plant species occur.	
		• No grading, clearing, storage of equipment or machinery, or other disturbance or construction activity will occur until all temporary construction fencing has been installed by the Park District, and its Construction Contractor, and inspected and	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		approved by the Qualified Botanist.	
		• Special Status plant species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).	
		• If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 ratio based on the area of lost habitat (accurately field measured). Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas. Restoration or reintroduction may be located on-site (i.e., within the project footprint or local vicinity) or at a nearby suitable offsite area within Coyote Hills Regional Park with suitable soil and hydrologic conditions for that species. At a minimum, the Special Status plant mitigation areas shall meet the following performance standards by the fifth year after mitigation planting/seeding;, as determined by monitoring, as follows.	
		• The compensation area shall be at least the same size as the impact area.	
		 Invasive species cover shall be less than or equal to the invasive species cover in the impact area. 	
		 Restored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years. 	
		 The final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the project Habitat Mitigation and Monitoring Plan (HMMP) 	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	-	see BIO-1b.	
		<u>Mitigation Measure BIO-1d, Species-Specific: Conservation</u> <u>Measures to Protect Special Status Birds, Migratory Birds, and</u> <u>Raptors:</u>	
		• If ground disturbance activities or impacts occur during the breeding season (approximately February 1 through August 31), pre-construction nesting migratory birds, raptors and other Special Status bird species surveys shall be conducted by a Qualified Biologist. Such surveys shall include but not be limited to the following: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act, or by their status as a protected species or Species of Special Concern.	
		• The pre-construction surveys shall occur within 14 days prior to the ground disturbance and vegetation removal activities. Surveys should be conducted within suitable nesting habitat within 200 feet of the area to be disturbed.	
		• If the survey does not identify any nesting migratory birds, raptors and other Special Status bird species in the areas potentially affected by the proposed activity, no further action is required. If nesting migratory birds, raptors and other Special Status bird species are found to occur that might be impacted by Project activities, a "no disturbance buffer" will be established around the habitat area. The Qualified Biologist will consult with CDFW to determine the size of the no-disturbance buffer, which will be marked off with temporary orange construction fencing. This buffer may vary depending on habitat characteristics and the species.	

Mitigation Measure BIO-1e, Species-Specific: Conservation

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	0	Measures to Protect Habitat for Salt Marsh Harvest Mouse: Additional project-specific avoidance and minimization measures for salt marsh harvest mouse (SMHM) in areas within 200 feet of suitable habitat, such as saline seasonal wetlands near Patterson Ranch Road (pickleweed dominated areas) would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail. These measures would be consistent with those required by USFWS and CDFW, and as specified in any permit conditions. They are likely to include the following:	
		• Removal of vegetation where needed in areas near suitable habitat under the supervision of an agency-approved Qualified Biologist using approved methods.	
		• Upon verifying work zones are mouse free by a Qualified Biologist, Install species-appropriate Environmentally Sensitive Area (ESA) wildlife exclusion fencing prior to initiation of construction in potential mouse habitat areas. Exclusion fencing for Salt Marsh Harvest Mouse shall be designed with agency approved doors to allow escape of trapped mice and have a "no climb" design to ensure mice do not climb over the fence once installed.	
		• Check in, under and around equipment and material stockpiles for Special Status wildlife on a daily basis each morning, prior to initiation of work.	
		<u>Mitigation Measure BIO-1f, Species-Specific: Conservation Measures</u> to Protect Habitat for California Black Rail during Breeding Season:	
		• Project specific avoidance and minimization measures for California black rail in areas within 200 feet of suitable habitat, such as saline seasonal wetlands, would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail, consistent with those required by the USFWS and CDFW as specified in any permit conditions.	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		• Protocol level surveys would be conducted in suitable habitat for California black rail that are within 200 feet of Project "Limits of Work" or as directed in any agency permit conditions. Surveys will be completed prior to initiation of construction each year of proposed construction activity that may potentially impact black rails.	
		• Protocol surveys would be conducted around dawn and/or dusk between February and March when black rails are most likely to vocalize during their breeding season.	
		• If active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows.	
		Mitigation Measure BIO-1g, Species-Specific: Conservation Measures to Protect Habitat for Burrowing Owl:	
		• Burrowing owl surveys will be completed by a CDFW-approved Qualified Biologist for those portions of the Project area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols establish by CDFW and may require multiple site visits with the final survey completed no more than 14 days prior to initiation of construction activities	
		• Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols.	

Mitigation Measure BIO-1h, Species-Specific: Conservation

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<u>Measures to Protect Western Pond Turtle:</u> A qualified Biologist approved by the CDFW shall conduct a preconstruction biological survey for Western Pond Turtle (WPT). The survey area shall include those portions of Crandall Creek (Line-K), Ardenwood Creek (Line-P), DUST Marsh, and Patterson Slough where construction disturbance could occur, or within 500 feet of all such construction activity. The surveys shall be conducted 48 hours prior to initial construction disturbance. Any identified WPT shall be relocated, by a qualified biologist, to a suitable location approved by CDFW and outside of the Project's construction disturbance boundaries.	
		Mitigation Measure BIO-1i:, Species-Specific: Conservation Measures to Protect Habitat for Bats (along with Implementation of the City of Fremont's Standard Development Plan): In advance of tree removal and dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:	
		 Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, outside of bat maternity roosting season (approximately April 15 – August 31), and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. 	
		• If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the Project site where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	0	be no longer active by the Qualified Biologist.	
		• The Qualified Biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F.	
		• Removal of trees with active or potentially active roost sites shall follow a two-step removal process:	
		 On the first day of tree removal and under supervision of the Qualified Biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. 	
		 On the following day and under the supervision of the Qualified Biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). 	
		 Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the Qualified Biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to roost. 	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
Impact BIO-2: Riparian Areas The Project could have a substantial adverse impact on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services.	PS	 <u>Mitigation Measure BIO-2a, Project-wide: Minimize Disturbance to</u> <u>Riparian Habitat:</u> For work occurring immediately adjacent to riparian habitat, including willow thickets and adjacent areas of oak woodland, riparian areas shall be clearly delineated with flagging by a Qualified Biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian friendly fiber rolls (i.e., no monofilament), or other appropriate erosion control material. Material staging, trails and all other Project-related activity shall be located as far possible from riparian areas. If riparian areas cannot be entirely avoided by construction activities, any temporarily impacted areas shall be restored to pre-construction conditions or better at the end of construction (see below Mitigation Measure BIO-2b :). <u>Mitigation Measure BIO-2b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Riparian Habitat:</u> 	LTS
		If temporary disturbance to riparian habitat within the Project area cannot be avoided, the HMMP discussed in Mitigation Measure BIO-1b, shall be implemented for riparian habitats temporarily impacted by construction activities. The Plan shall outline measures to restore, enhance, improve or re-establish riparian habitats on site.	
Impact BIO-3: Wetlands This Project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, as well as to Waters of the State of California.	PS	 Mitigation Measure BIO-3a, Project-wide: Avoid and Minimize Impacts to Wetlands and Waters of the U.S. and of the State: The Project jurisdictional wetland delineation shall be confirmed in coordination with the US Army Corps of Engineers (USACE) and CDFW to determine the extent of Waters of the U.S. and Waters of the State within the Project area to ensure construction footprints and associated construction disturbance areas do not encroach into wetlands. The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the USACE, RWQCB, and CDFW to the extent feasible. 	LTS

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		Mitigation Measure BIO-3b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Wetlands and Waters of the U.S. and of the State: If temporary disturbance or permanent loss of wetlands cannot be avoided, the HMMP (see Mitigation Measure BIO-1b) shall be implemented for wetlands or waters of the U.S. or of the State impacted by construction activities. The HMMP shall outline measures to restore, improve, or re- establish wetland habitat within Coyote Hills Regional Park to ensure compensatory mitigation requirements for wetland impacts are satisfied.	
CULTURAL AND TRIBAL CULTURAL RESOURCES			
Impact CUL-1: Project construction could disturb the Arden Dairy Milk House on the site, a historic building.	PS	<u>Mitigation Measure CUL – 1a:</u> The Park District shall retain the Arden Dairy Milk House in its current location to maintain integrity of location. Annual inspections by Park District maintenance staff shall be conducted each year to assess the building's interior and exterior condition, including weather tightness and vandal resistance. Following inspection, repairs and maintenance shall be conducted as necessary in a timely fashion. Repairs and maintenance activities and prioritization shall be guided by the Secretary of the Interior's <i>Standards for the Treatment of Historic Properties with Guidelines</i> <i>for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> or the Secretary of the Interior's <i>Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</i> (1995).	LTS
		<u>Mitigation Measure CUL – 1b:</u> If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's <i>Standards for the Treatment of</i> <i>Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing</i> <i>Historic Buildings</i> or the Secretary of the Interior's <i>Standards for Rehabilitation and Guidelines</i> <i>for Rehabilitating Historic Buildings</i> (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont.	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would disturb this historic building on the Project site.	PS	<u>Mitigation Measure CUL-2a:</u> The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interior-qualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board.	SU
		<u>Mitigation Measure CUL-2b</u> : In concert with Mitigation Measure CUL-2a, the Park District shall install an interpretive display or signage for public exhibition concerning the history of the historical resource at the site or provided to local historical societies and libraries.	
Impact CUL-3: Excavation and earth moving activities for the Proposed Project could have an adverse impact on the two unrecorded midden exposures, and the "shell midden" deposit present at two locations within the Project site. These middens may contain human remains, as well as currently undiscovered Native American cultural objects and human remains.	PS	<u>Mitigation Measure CUL-3a:</u> In order to mitigate potential adverse impacts to Native American cultural objects discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by a qualified Archaeologist meeting the Standards of the Secretary of the Interior. The Archaeologist shall, in accordance with <i>EBRPD Guidelines for Protecting Parkland</i> <i>Archaeological Sites</i> ¹ , identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in accordance with the recommendations of the evaluating Archaeologist in consultation with the East Bay Regional Park District, as Lead Agency, and CEQA Guidelines §15126.4 (b)(3)(C). Such mitigation may include additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that prehistoric human remains might be encountered. <u>Mitigation Measure CUL-3b</u> : If Native American human remains are discovered during	LTS
		construction, implement Mitigation Measure CUL-5.	
Impact CUL-4: Excavation, earth moving, and trenching for utilities during construction of the	PS	<u>Mitigation Measure CUL-4:</u> The Park District shall be notified if fossils and possible unique geological features are uncovered during construction of the Proposed Project. Work shall halt within 50 feet of the find until the situation can be assessed by a	LTS

¹ East Bay Regional Park District, 1989. Oakland, California.

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
Proposed Project could impact fossil containing rock units.	 	qualified Geologist or Paleontologist. The Geologist or Paleontologist shall identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. Mitigation may include avoidance of the resource; preparation of a treatment plan that could require recordation, collection, and analysis of the discovery; or curation of the collection and supporting documentation in an appropriate depository. All feasible recommendations of the Geologist or Paleontologist shall be implemented.	
Impact CUL-5: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on currently undiscovered human remains.	PS	Mitigation Measure CUL-5: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the Park District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	LTS
Impact CUL-6: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on known and currently undiscovered tribal cultural resources on the Project site.	PS	Mitigation Measure CUL-6a: Implement Mitigation Measure CUL-3a. Mitigation Measure CUL-6b: Implement Mitigation Measure CUL-5.	LTS
GEOLOGY AND SOILS	DC		I TO
The site is likely subject to strong seismic ground shaking during the design life of the Project, this	PS	<u>Mitigation Measure GEO-1:</u> Any construction built as a result of the implementation of the Project shall meet the requirements of the current California Building Code Vol. 1 and 2, including the California Building Standards, current edition, published by the	LTS

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
could result in damage to improperly designed structures on unstable geologic units and expansive soils.		International Conference of Building Officials, and as modified by the amendments, additions and deletions as adopted by the City of Fremont, California. Structures already present at the site and planned for reuse as part of the Project should be evaluated for seismic stability in accordance with Fremont General Plan Policy 10-2.5: Removal of Susceptible Structures, and Implementation 10-2.5.A: Seismic Retrofit Programs.	
Seismic-related Ground Failure, including liquefaction and expansive soils	PS	<u>Mitigation Measure GEO-2</u> : Design-level Geotechnical recommendations shall be prepared for the Project under the direction of a California Registered Geotechnical Engineer, or Registered Civil Engineer experienced in geotechnical engineering. The Geotechnical recommendations shall be based on the information developed for the site and shall establish the seismic design parameters, as determined by the geotechnical engineer or civil engineer in accordance with requirements of the California Building Code, for improvements to the Project site. The Geotechnical recommendations and design plans shall identify specific measures to reduce the liquefaction potential of surface soils in areas where liquefaction would pose a risk to health and safety in accordance with Public Resources Code Section 2693 (c).	LTS
Potential impacts of erosion and expansive soils	PS	<u>Mitigation Measure GEO-3:</u> In accordance with the Clean Water Act and the State Water Resources Control Board (SWRCB), the Park District for any construction projects that disturb more than one acre shall file a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of construction. The SWPPP shall include specific best management practices (BMPs) to reduce soil erosion. This is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).	LTS
		Additionally, any construction activities planned as a result of the implementation of the plan shall require an Erosion Control Plan to be submitted to the City of Fremont in conjunction with a Grading Permit Application. The Plan shall include winterization, dust, erosion and pollution control measures conforming to the California Stormwater Quality Association (CASQA) Best Management Practices handbooks, with sediment basin design calculations. The Erosion Control Plan shall describe the "best management practices" (BMPs) to be used during and after construction to control pollution resulting from both storm water and construction water runoff. The Plan shall include locations of vehicle and equipment staging, portable restrooms,	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	8	mobilization areas, and planned access routes.	
		Recommended soil stabilization techniques include placement of plastic-free straw wattles, silt fences, berms, and gravel construction entrance areas or other control to prevent tracking sediment off-site onto city streets and into storm drains, as well as hydroseeding or planting of all disturbed areas.	
Liquefaction and expansive soils	PS	Mitigation Measure GEO-4: Unstable Geologic Units and Expansive Soils: Proper foundation engineering and construction of any structures built as a result of implementation of the Project shall be performed in accordance with the recommendations of a Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design. Geotechnical recommendations shall address zones of potentially liquefiable or expansive soil as they relate to proposed improvements and provide foundation, road pavement section, concrete slab-on-grade, utility construction and other recommendations to mitigate any zones encountered. The structural engineering design shall incorporate seismic parameters as outlined in the current California Building Code. The Geotechnical recommendations shall establish the seismic design parameters, as determined by the geotechnical engineer in	LTS
GREENHOUSE GAS EMISSIC		accordance with requirements of the current California Building Code.	
		npacts related to greenhouse gas emissions therefore, no mitigation measures are required.	
HAZARDS AND HAZARDOU	v	ipulis related to greensouse gas emissions incregore, no malgation measures are required.	
Potential ecological impact of contaminated soils	PS	Mitigation Measure HAZ-1: Soil Testing and LANL Benchmarks: The Park District shall conduct sampling and testing of surface and near-surface soils in the areas of the Western Wetlands Natural Unit that are proposed for wetland restoration. The sampling and testing program shall include concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene. The test results shall be compared to the ecological screening benchmarks for soil and sediment (ECORISK Database) developed by Los Alamos National Laboratory (LANL). If no samples exceed the respective LANL benchmarks, no further mitigation is required.	LTS

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		Mitigation Measure HAZ-2: Ecological Risk Assessment: Using the results of testing	
		for organochlorine pesticides from Mitigation Measure HAZ-1, the Park District shall	
		conduct a focused ecological risk assessment to evaluate the effects of known concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT,	
		dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma),	
		endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene, relative to	
		likely ecological receptors at the site, particularly insectivorous birds and mammals. If	
		the predictive ecological assessment identifies significant risk, Mitigation Measures	
		HAZ-3, HAZ-4, and HAZ-5 shall be implemented. If the predictive ecological	
		assessment does not identify significant risk, no further mitigation is required.	
		Mitigation Measure HAZ-3: Site Specific Health and Safety Plan: If the assessment	
		described in Mitigation Measure HAZ-2 identifies significant risk, a Site-Specific	
		Health and Safety Plan for construction workers shall be prepared by the Park District	
		and approved by an industrial hygienist prior to the start of any earthmoving activities	
		associated with the alternative remediation strategies. The site-specific Health and	
		Safety Plan shall be implemented by the Construction Contractors during remediation work. The Site-Specific Health and Safety Plan shall be prepared in accordance with	
		the California Division of Occupational Safety and Health (CAL/OSHA) Standards	
		identified as part of Title 8 of the California Code of Regulations.	
		Mitigation Measure HAZ-4: Site Specific Air Quality Monitoring Plan: If the	
		assessment described in Mitigation Measure HAZ-2 identifies significant risk, an Air	
		Quality Monitoring Plan shall be prepared by the Park District and approved by the	
		California Department of Toxic Substances Control (DTSC) and/or other regulatory	
		oversight agency or agencies reviewing the remediation of the Project area, prior to	
		the start of any earthmoving activities associated with remediation strategies. The Air	
		Quality Monitoring Plan shall be implemented by the Construction Contractors	
		during remediation work in order to prevent toxic dust in the air from reaching levels	
		that are hazardous to the workers and/or surrounding residents. The Air Quality	
		Monitoring Plan shall be prepared in accordance with the CAL/OSHA Standards identified as part of Title 8 of the California Code of Regulations.	
		<u>Mitigation Measure HAZ-5: Soil Remediation:</u> Contaminated soil shall be excavated	
		and disposed offsite at a permitted Class II or Class III disposal facility, if required.	
		Alternatively, soils with very low levels of contamination that do not pose a human	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		health risk could be used beneficially as fill below paved parking areas or areas that receive aggregate base as a capping. Remediation shall include confirmation samples from excavations within remedial areas to limit the volume removed and verify that identified contaminated soil has been removed from the site. Adequate dust mitigation measures during excavation shall be implemented, and may include, but are not limited to, application of water and dust suppressants helps to control airborne particles, restrictions and/or limits to soil movement procedures, use of personal protective equipment (PPE), respirators, and decontamination procedures to reduce potential exposure to and spreading of contaminants. Truck cleaning shall include dry brushing after loading and using wheel grates to knock off excess dirt upon exiting the site. Soil loads in trucks shall be wetted slightly, leveled, and covered to minimize soil falling onto roadways. Transportation routes, times of work, and dust controls shall be chosen to reduce impacts to residential and other sensitive areas during removal and transport over public right-of-way (ROW). Remediation shall be conducted in coordination with, and approval of, the California Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB), should testing indicate soil contamination at levels requiring remedial action.	
Potential impact of asbestos and lead-based paint in structures on the site, including nearby schools	PS	<u>Mitigation Measure HAZ-6: Asbestos and Lead-Based Paint:</u> For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potentially friable asbestos-containing building materials (ACBMs) in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition that may disturb the materials, by a contractor registered with Cal/OSHA as an asbestos abatement contractor. The contractor performing abatement shall hold the C-22 asbestos abatement license or a B-class general license with asbestos certification. Because asbestos-containing materials on the project site are likely to become friable during demolition, all such materials must be abated prior to demolition. All demolition and disassembly activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. All friable asbestos materials, and any non-friable materials that may become friable during abatement, shall be disposed of	LTS

Significance Significant Impact Before Mitigation		Mitigation Measures	Significance With Mitigation *
		as hazardous (regulated) asbestos-containing material. Non-friable materials that are not made friable may be disposed of as non-hazardous asbestos-containing material. A 10-day notice of planned asbestos removal and disposal shall be given to the Bay Area Air Quality Management District (BAAQMD), along with a notification of demolition of structure(s). The local office of the State Occupational Safety and Health Administration (OSHA) shall be notified at least 24 hours prior to abatement activities.	
		For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potential lead-based paint. Personnel must have lead training sufficient to meet the requirements of Cal/OSHA, 8 CCR 1532.1. The workers shall use lead-safe work practices when handling paints with any detectable amount of lead. A containment area shall be used to prevent the buildup of lead dust on remaining surfaces, in compliance with California Department of Public Health requirements. All waste streams created as part of the project shall be profiled or characterized prior to disposal, and packaged as applicable, in compliance with the requirements of the California Department of Toxic Substances Control and Title 22.	
HYDROLOGY AND WATER			
QUALITY Erosion and Sediment Control	PS	<u>Mitigation Measure HYDRO-1: Erosion and Sediment Control:</u> The Park District shall prepare a Soil Erosion Control and Revegetation Plan that addresses temporary construction-related temporary erosion control and provides permanent erosion control through revegetation and other means. The Plan, which can be a part of the project SWPPP see (HYDRO-2) shall be incorporated into the Project's Construction Documents. The Construction Plans shall specify erosion and sediment control measures, including Best Management Practices (BMPs) to control short-term construction-related water quality impacts. BMPs shall include at a minimum the following measures (where applicable):	LTS
		• Limiting access routes and stabilizing access points. Surface disturbance of soil and vegetation shall be minimized; existing access and maintenance roads shall be used wherever feasible.	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		• Stabilizing graded areas as soon as possible following completion of disturbance with seeding, mulching, and installation of erosion control materials such erosion control blankets and straw rolls, or other approved and effective methods. Only native seed and plant materials shall be used, unless otherwise approved by the Qualified Biologist.	
		• Delineating clearing limits, easements, setbacks, environmentally sensitive areas, and drainage courses by marking them in the field, and installing exclusion fencing, silt fencing, and/or coir logs or straw rolls.	
		• Stabilizing and preventing sediment from entering temporary conveyance channels and stormdrain outlets.	
		• If rainfall is expected to occur, using temporary sediment control measures, such as additional silt fencing, straw rolls, covering stock piles and directing runoff to sediment detention structures to filter and remove sediment.	
		• Use temporary measures, such as flow diversion, temporary ditches, and silt fencing or straw wattles.	
		• Any stockpiled soil shall be placed, sloped, and covered so that it would not be subject to accelerated erosion.	
		• Accidental discharge of all Project related materials and fluids into local waterways shall be avoided by using straw rolls or silt fences, constructing berms or barriers around construction materials, or installing geofabric in disturbed areas with long, steep slopes.	
		• After ground-disturbing activities are complete for each Project component constructed, all graded or disturbed areas shall be covered with protective material such as mulch, and re-seeded with native plant species. The Erosion Control and Revegetation Plan SWPPP shall include details regarding site preparation, top soiling or composting, seeding, fertilizer, mulching, and temporary irrigation.	
		Mitigation Measure HYDRO-2: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) and a Spill Control and Countermeasures Plan (SCCP) shall be prepared and implemented by the Park District's Construction Contractor following SWRCB standards for erosion control and stormwater management. Specific measures, as cited below, shall be adapted from the most current edition of the Stormwater Best Management Practice Handbook for Construction, published by the California Stormwater Quality Association (CASQA).	

Significant Significant Impact Before Mitigation		Mitigation Measures	Significance With Mitigation *
		The SWPPP shall include Best Management Practices (BMPs) to prevent or minimize stormwater pollution during construction activities, as well as addressing post construction stormwater management and permanent erosion control. The Project Erosion Control and Revegetation Plan, and Spill Control and Countermeasures Plan, shall be included as part of the SWPPP. Plan preparation and implementation shall be included in the Project's Construction Documents.	
		Mitigation Measure HYDRO-3: Equipment Maintenance: All refueling and/or maintenance of heavy equipment shall take place at a minimum of 50 feet away from the top of bank of creeks and all identified jurisdictional wetlands and Waters of the US drainage courses. The refueling/maintenance and construction staging area shall be bermed, graveled, or covered with straw and incorporate measures for capture of any accidental spills. All temporary construction lay-down and staging areas shall be restored upon completion of work with silt fences, straw rolls, and ground bags, etc. removed.	
Potential impact of wells on groundwater	PS	 <u>Mitigation Measure HYDRO-4: Well:</u> The Park District shall coordinate and consult with the Alameda County Water District and obtain a permit or approval prior to implementing the following: Deconstruction and closure of abandoned wells and related irrigation and drainage infrastructure. 	LTS
		 Drilling for piers or wells that may penetrate groundwater aquifers. Provide continued access to existing monitoring wells and continue to cooperate with ACWD in monitoring activities. <u>Mitigation Measure HYDRO-5: Unused Septic Tank and Leachfield Systems:</u> The Park District shall obtain a permit or approval from Alameda County Environmental Health for the closure and abandonment of obsolete and unused septic tank and leachfield systems. 	
Potential stormwater impacts	PS	Mitigation Measure HYDRO-6: Stormwater Management: The Park District shall prepare and implement a post construction stormwater management plan in compliance with the City of Fremont's joint municipal stormwater permit and development permit program.	LTS
Potential flood hazards	PS	<u>Mitigation Measure HYDRO-7: Bridge Design:</u> The Park District shall prepare and submit final bridge plans for all new vehicular and pedestrian bridges that cross waterways under jurisdiction by the City of Fremont or Alameda County. The bridge plans are subject to review and approval by the City of Fremont Engineering	LTS

Significance Significant Impact Before Mitigation		Mitigation Measures	Significance With Mitigation *
		Department and Alameda County Flood Control and Water Conservation District. The bridge plans shall include structural engineering, geotechnical engineering, and hydraulic engineering information. The responsible designer shall be a State of California licensed Civil Engineer and shall be experienced in hydraulic analysis, bridge design, and flood channel and bank protection design. The Engineering Plans shall demonstrate conformity to City of Fremont, Alameda County, and FEMA floodplain management regulations and include design elevations of the bridge/boardwalk, conformity with 100-year flood elevation freeboard requirements, the locations and structural design of the bridge abutments with respect to flood	
LAND USE AND		flows, bridge loading, and channel bank protection requirements.	
PLANNING			
	nnt Project or cumulative im	pacts related to land use and planning; therefore, no mitigation measures are required.	
MINERAL RESOURCES			
	int Project or cumulative im	pacts related to land use and planning; therefore, no mitigation measures are required.	
NOISE			
Temporary noise impacts	PS	<u>Mitigation Measure NOI-1:</u> To mitigate temporary noise impacts, the following BMPs shall be incorporated into the construction documents to be implemented by the Project Contractor:	LTS
		• Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.	
		• Use quietest type of construction equipment whenever possible, particularly air compressors.	
		• Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.	
		• Prohibit unnecessary idling of internal combustion engines.	
		 Designate a noise (and vibration) disturbance coordinator at the Park District who shall be responsible for responding to complaints about noise (and vibration) during construction. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and determine and implement reasonable measures warranted to correct the problem. Limit noise generating activities to the weekday hours of seven a.m. to seven 	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
	0	p.m. and the Saturday or holiday hours of nine a.m. to six p.m., with Sunday	
		noise not allowed per City noise ordinance.	
POPULATION AND			
HOUSING	D. t. t. t. t. t.	1. 1. 1 1. 1 4 .1 6	
The Project would not result in significant. PUBLIC SERVICES	Project or cumulative in	ppacts related to land use and planning; therefore, no mitigation measures are required.	
The Project would not result in significant.	Project or cumulative in	ppacts related to public services; therefore, no mitigation measures are required.	
	Project or cumulative in	pacts related to recreation; therefore, no mitigation measures are required.	
TRANSPORTATION AND TRAFFIC			
Impact TRANS-1: The	PS	Mitigation Measure TRANSP-1: To mitigate excessive vehicle traffic delays at the	LTS
Proposed Project would result in		Patterson Ranch Road approach, the City of Fremont should institute "Right Turn	
an increase in traffic delays at the		Only" from the Patterson Ranch Road and Commerce Drive approaches during peak	
Commerce Drive/Paseo Padre		commute times. Vehicles would have the opportunity to either turn off Paseo Padre	
Parkway/Patterson Ranch Road		Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or	
intersection.		Kaiser Drive. Traffic signs, striping, and raised curbs may be needed to reinforce the	
		right-turn only requirement. The Park District shall contribute its fair share (one	
		percent) toward the cost of the improvements.	
Impact TRANS-2: The	PS	Mitigation Measure TRANSP-2: The Proposed Project shall contribute a fair share	LTS
Proposed Project would increase		(one percent) of the cost of future intersection modifications to improve pedestrian	
use of the pedestrian and bicyclist		and bicycle access across Paseo Padre Parkway, at or before the time the City of	
crosswalk at Paseo Padre		Fremont implements intersection modifications. These intersection improvements	
Parkway, which is not signalized.		may consist of:	
		• Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet.	
		• Stripe a horizontal buffer between the right-most vehicle lane on northbound	
		and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles.	
		• Shorten the northbound right turn weaving area to slow vehicles before the	
		weaving maneuver and adding green pavement markings to indicate the weaving zone.	

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		 Install additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks. Upgrade the crosswalks from transverse markings (two white lines) to 	
		continental markings.	
		Add yield lines 30 feet in advance of the crosswalks.Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway.	
		 The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future. 	
Impact TRANSP-3: Vehicle traffic generated by the Proposed Project could worsen the Level of Service at the intersection of Paseo Padre Parkway/ Patterson Ranch Road/Commerce Drive.	PS	Mitigation Measure TRANSP-3: Implement Mitigation Measure TRANSP-1.	LTS
Impact TRANSP-4: Bicycle and pedestrian traffic generated by the Proposed Project could increase transportation hazards at the intersection of Paseo Padre Parkway/ Patterson Ranch Road/Commerce Drive.	PS	<u>Mitigation Measure TRANSP-4:</u> Implement Mitigation Measure TRANSP-2.	LTS
Impact TRANSP-5: Bicycle and pedestrian traffic generated by the Proposed Project could worsen the bicycle and pedestrian safety at the intersection of Paseo Padre Parkway/ Patterson Ranch Road/Commerce Drive.	PS	<u>Mitigation Measure TRANSP-5:</u> Implement Mitigation Measure TRANSP-2.	LTS

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
TRIBAL CULTURAL			
RESOURCES			
		See Cultural and Tribal Cultural Resources, above.	
UTILITIES AND SERVICE			
SYSTEMS			
Construction and Demolition Debris	PS	<u>Mitigation Measure UTIL-1: Construction and Demolition Debris:</u> Prior to completion of the plans and specifications, the Park District shall review the plans to ensure that they include a solid waste recovery plan. This recovery plan shall be in compliance with the Park District's adopted sustainability policy, which is directed at minimizing disposal of solid waste generated during construction in accordance with applicable state and county codes. The recovery plan shall address, at a minimum, recycling of asphalt and concrete paving materials, lumber and metal and concrete pipes and tanks, and balancing graded soil on site to the maximum extent feasible.	LTS

2.4 Unavoidable Significant Impacts

Section 15126.2(b) of the CEQA Guidelines requires that an EIR identify any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. As discussed in 4.2 Cultural and Tribal Cultural Resources, disassembly of the Contractors Residence would result in a Significant and Unavoidable Impact on historic architectural resources.

2.5 Alternatives to the Project

This CEQA review analyzes the following alternatives to the Proposed Project:

No Project Alternative

Under the No Project Alternative, the site would remain in its existing condition. There would be no visitor serving facilities or trails constructed that would allow public access and use of the site. No habitat restoration, enhancement, and wildlife management, or vegetation and pest management would occur. The existing archaeological resources and human remains on the site would not be disturbed. The existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition. No utility upgrades and extensions, or climate change and sea level rise adaptation, would occur on the site.

Restore Contractors Residence in Place Alternative

The Restore Contractors Residence in Place Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would remain in its current location, and be restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). To properly stabilize the Contractors Residence for restoration, the building's foundation would require repair and reconstruction. This would involve mobilization of heavy equipment in the vicinity of the structure in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six to eight month period.

Relocate and Restore Contractors Residence Alternative

The Relocate and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would be relocated to the Farm Yard Agricultural Unit, to a site that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitating* (1995). Moving the Contractors Residence would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer.

Hand Disassemble, Relocate, and Restore Contractors Residence Alternative

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Like the Proposed Project, this alternative would involve dismantling of the Contractors Residence with hand tools. Unlike the Proposed Project, the Contractors Residence would be relocated at a site in the Farm Yard Agricultural Unit that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Compared to the other alternatives discussed above, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would involve more work done by hand, and would take longer.

Environmentally Superior Alternative

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the Environmentally Superior Alternative.

3 PROJECT DESCRIPTION

3.1 Project Summary

The Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The existing Coyote Hills Regional Park is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84, leading to the Dumbarton Bridge (see **Figure 3-1 - Regional Location Map**). The 306-acre Expansion area borders the east side of the existing Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the to the north by the Alameda Creek Flood Control Channel.

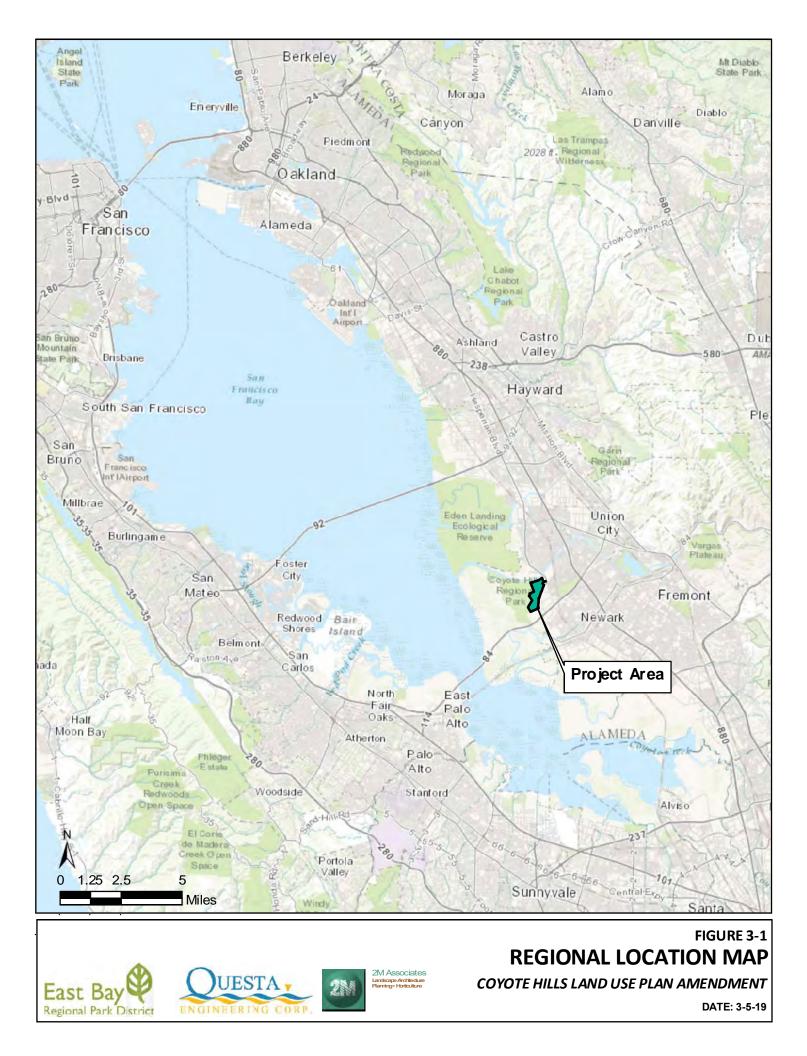
The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and visitor-serving facilities and public access trail development proposed for the Expansion area. These components are discussed in more detail below.

The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, over 4 miles of new hiking trails, wildlife observation platforms, and approximately 130 acres of habitat restoration and enhancement. The Trail Plan would provide connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway to the south and north, and a connection to the City's proposed Dumbarton Bridge to Quarry Lakes and other regional trails. A flood control and wetlands mitigation Project covering about 100 acres in the southern part of the Project area would be constructed in cooperation with Alameda County Flood Control and Water Conservation District.

Proposed habitat restoration and enhancement types would include willow thicket and mixed riparian forest along and adjacent to Patterson Slough north of Patterson Ranch Road, as well as oak savanna, seasonal wetlands, and enhanced grasslands. The Project would protect existing views of the Coyote Hills along Paseo Padre Parkway, continue urban agriculture along this corridor, and preserve, protect and interpret the site's rich natural resources, Native American culture, and historic resources. Urban agriculture and agricultural-related activities, such as a farm stand, would be located on approximately 45 acres of land south of Patterson Ranch Road and north of Ardenwood Creek.

Provisions of Park District Ordinance 38 applicable to the adjoining Coyote Hills Regional Park would be extended to the Park Expansion area. As such, Park operating hours would be from dawn to dusk and no lighting other than security lighting in areas of buildings would be provided. Consistent with current regulations at Coyote Hills Park, the Park Expansion area would be designated as a "Leash Required Area" for Park visitors with dogs, with no leash optional open areas. Signage and fencing would be used to keep Park visitors, including un-leashed dogs, on trails and other designated public areas and out of existing and restored habitat. The remnant existing and restored willow thicket and mixed riparian area along Patterson Slough would be restricted from this area, with the exception of a foot path spur trail leading to a wildlife observation platform on the southwest end of the Slough. The west Slough overlook or footpath would follow an existing dirt maintenance access road to a proposed wildlife observation platform at the location of the demolished former Farm Labor House dormitories. These were demolished in 2016.

Restoring Park resources and managing the Park as a "Climate Smart Park," including accommodating climate change and anticipated San Francisco Bay sea level rise-related threats to the



Park's resources, and using urban agriculture and a relatively large native tree afforestation Project to trap or sequester atmospheric carbon and other greenhouse gases (GHGs), are other important components of the Proposed Project. The Project would also provide opportunities for cooperative research and public education on these issues within the Park Expansion area. The Project components would be implemented over a three- to five-year period, as funding and capacity allows.

As lead agency, the Park District has prepared this environmental document in accordance with the California Environmental Quality Act (CEQA). This document presents the recommendations and actions contained in the LUPA that would result in physical changes to the baseline environmental conditions within the Project Area. The proposed physical changes, referred to collectively as the "Project," are summarized in this Project Description. Additional, more detailed descriptions of these proposals, as found in the LUPA and supporting documents for the Park Development Plan, including the Existing Environmental Conditions and Opportunities and Constraints Report, are incorporated by reference into this CEQA document.

3.2 Planning and Design Principles and Program Objectives

The LUPA and Park Development Plan have been developed with the following general design principles and planning objectives:

- Ensuring integration of the Expansion area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area.
- Protecting and/or enhancing cultural resources, including providing compatible recreational and interpretive opportunities.
- Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.
- Providing for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resource areas.
- Removing the Contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.
- Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.
- Providing opportunities for urban agriculture.
- Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.
- Developing and managing the Expansion area to be adaptable and sustainable, with awareness of a changing climate that may affect habitat and public access.
- Designing improvements for low maintenance, high durability and to reduce park operating cost, where feasible.
- Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.

A more complete description of Project Goals and Objectives is included in the LUPA.

3.3 Land Use Plan Amendment and Park Development Plan

Land Use Plan Amendment Unit Designations

The Project Area varies across the 306 acres with respect to soil and hydrologic conditions, plant and wildlife habitat, and current use. To create a land use and development plan appropriate for these varied characteristics, the Project Area has been separated into three Land Use designations subdivided into five Planning Units. These are shown in Figure 3-2 –Land Use Units and Facilities Map Amendment and summarized below in Table 3-1 - Plan Summary. Each Planning Unit encompasses a geographic region of similar use and physical and biological conditions. The Planning Units (units) are used in LUPA where they are referred to as the five Land Use Plan Amendment Units. Proposed trails and visitor-serving facilities are also briefly discussed in this section for each unit, and more fully described in the subsequent section on the proposed Park Development Plan.

INDED		
Land Use Designation	Planning Unit	Acreage
	Patterson Slough	126
Natural	Western Wetlands	29
	Southern Wetlands	99
Agricultural	Historic Patterson Ranch Farm	45
Recreational	Ranch Road Recreation	7
	Total	306

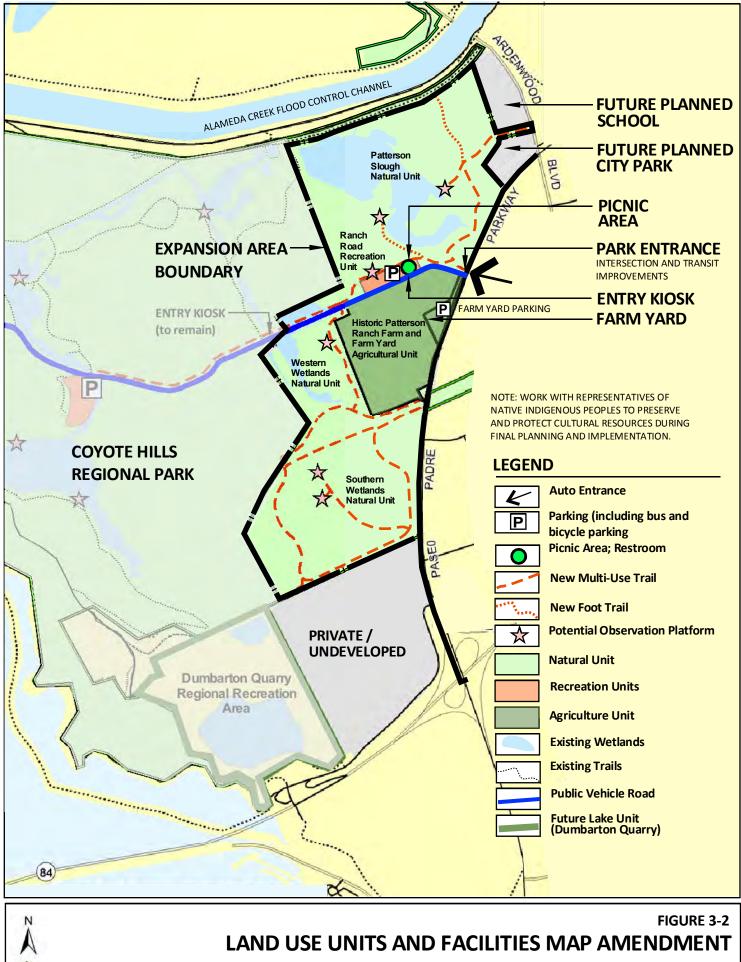
TABLE 3-1:LUPA PLAN SUMMARY

The three land use designations are: Natural Use, Recreational Use, and Agricultural Use. A majority of the Project Area is designated for Natural Use (254 acres). The Natural Use designation includes three of the planning units: Patterson Slough, Western Wetlands, and Southern Wetlands. Development of the three Natural Use Units would consist of habitat restoration and enhancement, flood control and wetlands mitigation, and trail development. The Agricultural Use designation includes the Historic Patterson Ranch Farm Unit, which would continue to be used for agricultural purposes. The Recreational Use designation includes the Ranch Road Recreation Unit that would be used for trails, parking and other Visitor-serving facilities.

The focus of designated Natural Units is on wildlife habitat and native plant community management. Visitor-serving facilities such as parking areas, restrooms, and picnic areas occur in Recreation Units. Farming, livestock, and grazing are the principal designated land-uses in Agricultural Units. Included in this designation are areas for repair and storage of farm equipment and machinery, and crop processing and storage, such as hay storage. Also specifically allowed in the Agricultural Units are farm stands for produce sale. Public access trails, small trail head and staging areas, wildlife viewing platforms, and interpretive panels and displays are allowable uses in all Units. The public access trails would also be used for Emergency Vehicle and Maintenance Access (EVMA). Each of the Planning Units, its location, and current and future use as proposed are described below.

Patterson Slough Natural Unit

The Patterson Slough Natural Unit is the northernmost Unit of the Project Area. The Unit covers 126 acres and lies north of Patterson Ranch Road. The Patterson Slough drainage way is in the approximate center of the Unit, flowing slowly northeast through the DUST Marsh to eventually drain to the Alameda Creek Flood Control Channel. A remnant willow-dominated riparian forest



1000 2000 FEET

500

COYOTE HILLS LAND USE PLAN AMENDMENT

DATE: 3-5-19

containing abundant invasive weeds lines the Slough. This area has known culturally sensitive resources that would be protected during restoration by installing Environmentally Sensitive Area (ESA) fencing around sensitive areas, and by requiring the presence of a qualified Cultural Resource Monitor and representatives of the Ohlone peoples when soil disturbance associated with restoration, demolition, and limited trail construction work occurs in sensitive areas. Restoration and enhancement may include activities such as topsoil grading/tilling, seeding, planting, soil amendment (compost addition) and temporary irrigation, followed by several years of vegetation management, such as flail mowing. These activities would be implemented as needed to exhaust the weed-seed bank in the topsoil, with the revegetation and restoration work establishing areas of willow sausal or willow thicket, mixed riparian forest, oak savanna, seasonal wetlands, and native grasslands. Up to 6,000 to 8,000 native trees and shrubs, including oaks planted as acorns and seedlings, and live cottonwood and willow stakes, would be planted in this area over a proposed three- to five-year implementation period. Other native tree and shrub species obtained from nurseries primarily located in the East Bay including coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepsis*), and box elder (*Acer negundo*).

Shallow depressions would be created to establish seasonal wetland by either shallow excavations (~1-2 feet) below current grades/elevations, or by importing clean soil to cap over existing grades to establish a more complex topography and support wetland creation. Grassland and oak savanna areas considered too dry for riparian restoration would be mowed and/or grazed for fire fuels management, weed control and agricultural purposes.

A trail system would be constructed connecting the existing Crandall Creek Trail, the San Francisco Bay Trail and the Ranch Road Recreational Unit trails. The new trails would include paved multi-use segments and foot paths, with two spur trails to wildlife observation platforms along the east and west sides of Patterson Slough. The wildlife observation platforms would be setback a minimum of 100 feet from the edge of Patterson Slough in voluntary compliance with City of Fremont Watercourse Protection requirements per Municipal Code Section 18.210.120. As part of a future phase of the project, the Park District would cooperate with the City of Fremont and the Alameda County Flood Control and Water Conservation District (ACFCWCD) in constructing an approximately 550-foot long, 10-foot wide clear span aluminum walkway cantilevered (attached) to the west side of the existing Ardenwood Boulevard Bridge over Alameda Creek. This offsite improvement would significantly enhance pedestrian and bicycle safety for the north-south connection of the San Francisco Bay Trail over Alameda Creek.

Western Wetlands Natural Unit

The Western Wetlands Natural Unit is located south of the Paterson Slough Natural Unit and west of the Historic Patterson Ranch Farm Agricultural and Ranch Road Recreational Units. This 29-acre low-lying area contains a large, depressional wetland that ponds water during the winter rainy period, as well as areas that are slightly saline and sodic (salt- and sodium-affected). Although this area has been previously farmed, which required an agricultural drainage system, that system has since deteriorated and the area is now no longer suitable for farming. The plant cover is mostly invasive weedy species. The plan proposed for this area includes actions such as converting weedy areas to native grassland pasture, and managed/timed flooding of depressional ponded areas in the late summer and fall months to provide a fresh water source for wildlife use. This option depends on the availability of irrigation water from a nearby irrigation line that was once used to flood irrigate fresh water wetlands and seasonal wetlands in Coyote Hills Regional Park to the west. Minor surface grading (~1-2 feet in depth) would be used to enhance and expand seasonal wetland areas. A northsouth multi-use connector trail (Harvest Trail) would run on uplands along the east side of this Unit, adjacent to agricultural fields. Native cottonwood and willow trees, similar to the current open stand of these trees to the west, would also be planted.

Southern Wetlands Natural Unit

The Southern Wetlands Natural Unit covers the southernmost land of the Project Area. This 99-acre Unit extends from the Western Wetlands Unit and Line P/Ardenwood Creek to the southern property boundary formed by the levee separating it from adjacent Cargill, Inc., lands. ACFCWCD would oversee the development, monitoring, and management of the flood control and habitat restoration elements of this Unit. This previously farmed and now fallow and ruderal area will be restored to create a mix of riparian, freshwater and seasonal wetlands, saline-alkaline wetlands, and oak savanna. Maintenance access roads would be constructed for the maintenance and monitoring activities required by the ACFCWCD, and would also provide public multi-use trail access. The Park District would be responsible for constructing and/or installing interpretive signage, wildlife observation areas, a short connector trail west of the mitigation area, and a new 80-foot long vehicular clear span bridge over Ardenwood Creek. The Park District would also be responsible for operating, and monitoring public access use within this Unit.

Historic Patterson Ranch Farm and Farm Yard Agricultural Unit

The 45-acre Historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway in this designated Agricultural Unit would continue to be used for small-scale, local agriculture crop production, including field and row crops, pasture and hay lands, and grazing. In addition to agricultural land uses, the Farm Yard portion of the Unit would allow the adaptive re-use of a historic farm building (the Milk House) as a produce stand or other agriculturally related use. This area would also include a small, 20-car parking lot to serve users in this area. Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. New utilities, including domestic water and electric service, would be extended to the existing farm buildings in the Farm Yard area. The Farm Yard entry-road, located south of Patterson Ranch Road and near to Paseo Padre Parkway, would be relocated, the area landscaped, and a new Park Entry sign installed. Connections would also be made to the new San Francisco Bay Trail along the west side of Paseo Padre Parkway, and the Bay Trail would be extended south to the vicinity of Dumbarton Circle and Quarry Road, an additional approximately 1,00 feet. The trail construction work would occur within a weedy/ruderal area within the City of Fremont Paseo Padre Parkway Road ROW The Park District would cooperate and coordinate with the City in the construction and operation of the trail and any needed Dumbarton Circle-Paseo Padre Parkway intersection improvements.

Ranch Road Recreational Unit

Recreation and visitor-serving facilities are proposed for this approximately 7-acre Recreational Unit, located north of Patterson Ranch Road and immediately west of Paseo Padre Parkway, including an approximately 100-car asphalt-paved parking lot, a one-acre open-use area, restroom with plumbing, picnic facilities, and a new park entry kiosk. The existing Tuibun Trail, which runs between Paseo Padre Parkway and the existing Visitor Center, a distance of about 1.5 miles, would be relocated to the north of the proposed parking lot and improved in this Unit. New utilities and utility upgrades, including new water service, gas, sewer, and underground electrical and communications cables, would run through this Unit, within or adjacent to the existing road and trail, to the restroom and picnic area. These utilities would also be extended within the Patterson Ranch Road prism to the Visitor Center (see also **Utilities** section).

Park Development Plan

The proposed Park Development Plan has eight main elements:

- 1. Habitat Restoration and Enhancement
- 2. Recreation and Visitor-serving Facilities

- 3. Public Access Trail Construction and Operation
- 4. Cultural Resources Management
- 5. Agricultural Land Uses and Associated Activity
- 6. Surface Water and Groundwater Management
- 7. Utility Upgrades and Extensions
- 8. Climate Change and Sea Level Rise

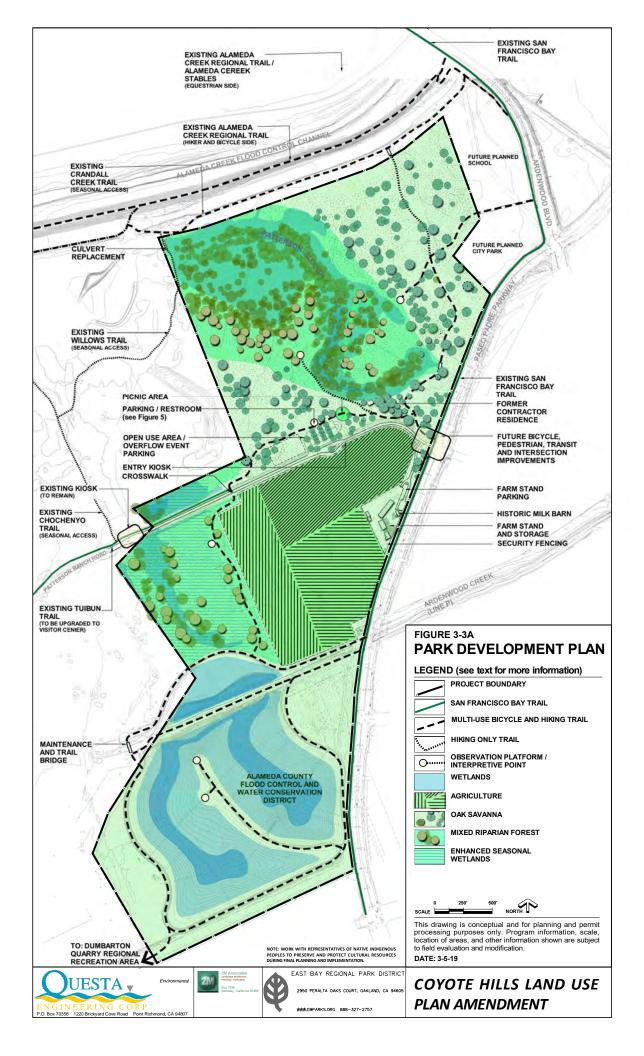
1. Habitat Restoration and Enhancement

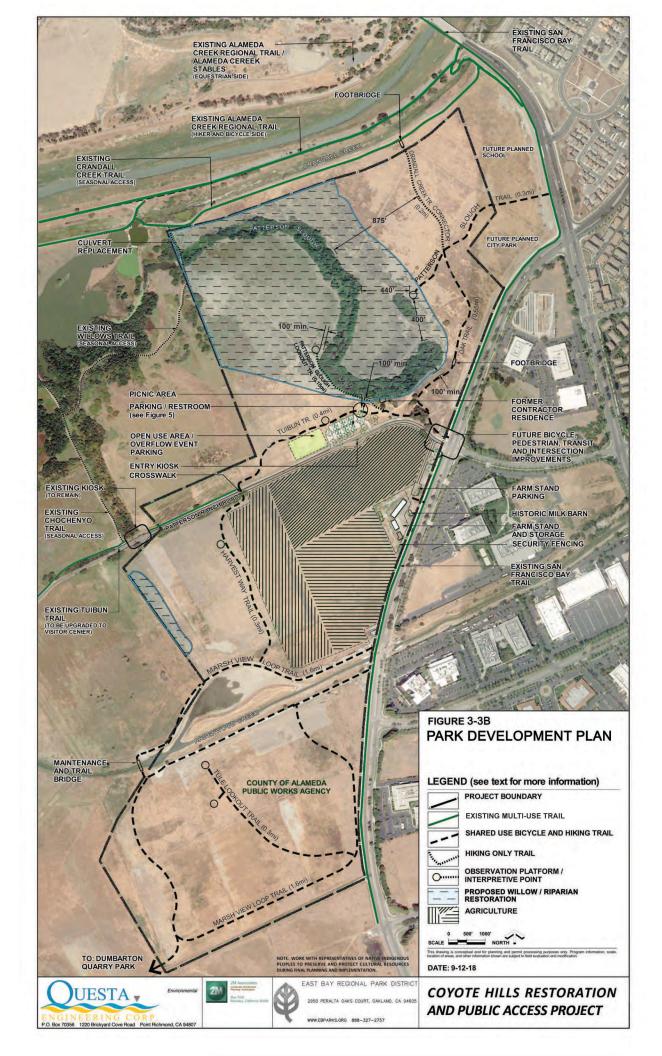
Habitat restoration and enhancement actions would focus on protecting, expanding and enhancing the unique and historical willow sausal (willow thickets), expanding to the east and west the mixed riparian forest along Patterson Slough, and creating ecologically complimentary seasonal wetlands/oak savanna and native grassland areas for wildlife habitat and agricultural grazing adjacent to the Slough in the Patterson Slough Natural Unit. Restoration and enhancement also include creating and enhancing freshwater and saline-alkali seasonal wetlands and willow and cotton wood tree cluster plantings in the Western Wetlands Natural Unit. These land cover types are generally shown in Figure 3-3A - Park Development Plan and summarized in Table 3-2. This is a graphic or rendered version of the Plan. Figure 3-3B presents similar conceptual plan information on a recent aerial photographic base to allow readers to view the location of Proposed Project facilities with respect to landmarks and key features, such as roadways, streams and the Patterson Slough riparian corridor. Key setback distances from the edge of the sensitive Patterson Slough riparian corridor edge are also indicated on this aerial Concept Plan drawing. Target acreages for restoration and enhancement are presented in Table 3-2. These are based on the current understanding of site hydrology and soil conditions and are approximate. Additional soil and hydrologic fieldwork would be completed along with pilot or test plantings to develop a final Restoration Planting Plan, established Irrigation Plans, and post-planting Vegetation and Invasive Species Management Plan prior to full-scale implementation over a three- to five-year period. Public access facilities and Trail Plan Implementation would occur during the Year One pilot or planting period.

Land Cover Designation	Possible
	Range
	(Acres)
Willow sausal and mixed riparian forest, cottonwood-willow grove	50 - 65
Seasonal Wetlands	8 - 12
Oak savanna	25 - 35
Managed and enhanced grasslands and pasture, complex topography	50 - 60
Agriculture, field and row crops	43 - 48
Roads, trails, parking, Farm Yard, and miscellaneous developed areas	5 – 7
Native landscaped areas	8-10
Existing willow thickets and mixed riparian forest (to be enhanced and	12
protected)	
Existing freshwater seasonal and saline seasonal wetlands (to be enhanced	6.5
and protected)	
Flood Control Basins, Mitigation freshwater, perennial, seasonal and saline-	92 - 99
alkali wetlands, riparian and savanna	

TABLE 3-2: LAND COVER AREA ACREAGE TARGET

Several years of active vegetation management would occur as part of habitat restoration, including pest and weed control, mowing and/or goat grazing, and seasonal irrigation during a 3-year plant





establishment period. Other than selective and careful removal of several inches of the surface weedseed containing topsoil, and replacement with imported soil and compost in some habitat restoration and enhancement areas, the proposed restoration and enhancement program for most areas would be achieved without employing large-scale grading or significantly changing site hydrologic conditions. Grasslands restoration would focus on the most visually prominent areas as seen from Ardenwood Boulevard, Paseo Padre Parkway and Patterson Ranch Road.

New seasonal wetlands would be created by grading 1- to 2-foot deep, un-drained or depressional basins in the lower lying areas, along the west side of the Park Expansion area.

Existing depressional areas may be unseasonably (late summer to fall) flooded for improved habitat value and bird watching, depending on the availability of irrigation water. This would involve reactivation of an existing irrigation line located immediately west of the Western Wetlands, and connecting it to an existing irrigation well as a source of water. Additional bird roosting areas would be created by planting willow and cottonwood trees in the seasonal wetlands along the west side of the Project, both north and south of Patterson Ranch Road.

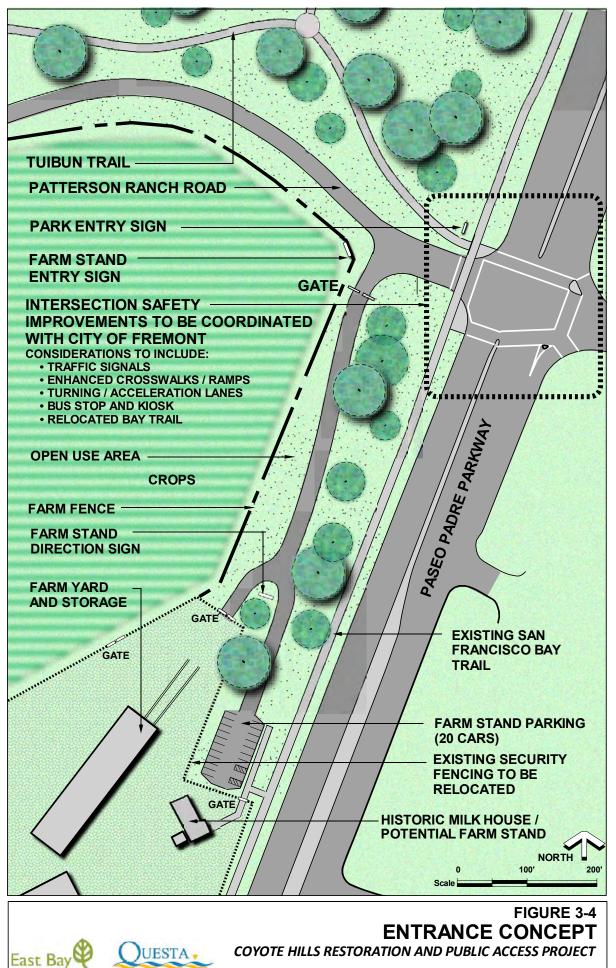
2. Recreation and Visitor-serving Facilities Construction and Operation

Recreation and Visitor-serving Facilities are proposed for the Ranch Road Recreation Unit and the Farm Yard portion of the Historic Patterson Ranch Farm Agricultural Unit. The proposed changes and improvements to the Park Entry and Farm Yard Area, and current Parking Concept, are shown in **Figures 3-4 - Entrance Concept** and **3-5 - Parking Concept**, respectively. The final plans for these areas would include the Project elements listed below and within the general facility footprints shown, but the layout and arrangement of the components may vary. Proposed facilities, as shown on the draft Conceptual Site Plan, are summarized in **Table 3-3 – Summary of Visitor-Serving Facilities**. Park visitors using the new recreation facilities, including trails, would be subject to Park District rules and regulations, as contained in Park District Ordinance 38 (www.ebparks.org/ord38). Normal hours of operation would be dawn to dusk.

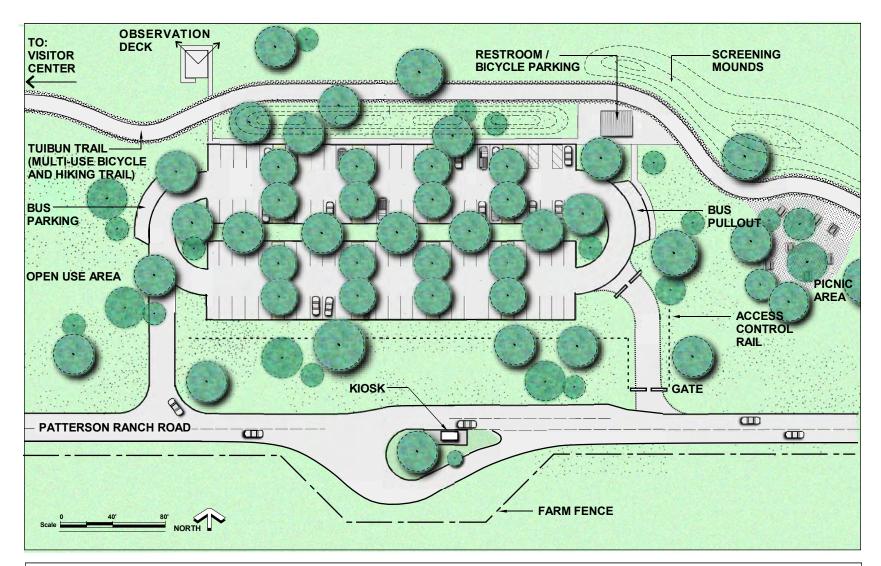
Visitor-serving facilities include an approximately 100-car paved parking lot occupying about 1 acre of land, and an approximately 1-acre grassed open-use recreation area available for use by visitors, and to serve as a visual buffer between the Tuibun Trail and Patterson Ranch Road. The open use area would initially be used as interim parking and a restoration staging area, and may also be used for staging Park-related operations and maintenance activities such as tractor mowing, grazing, mosquito abatement, or overflow parking during special events. Visitor-serving facilities also include a new restroom facility with water and flush toilets, potable water, wildlife overlook future picnic area, interpretive elements, and new entry kiosk. Bus and bicycle parking would also be provided. A new Park entry sign, landscape plantings, and fencing would be installed at the Park entry. No park lighting is proposed other than security lights in the Farm Yard area.

The proposed parking lot and picnic facilities are located approximately 150 and 100 feet away (respectively) from the edge of the Patterson Slough Riparian Corridor. These areas would be screened from the Slough by crating low mounds (2 to 4 feet high), landscaped with native trees and shrubs.

Pedestrian and bicycle improvements would be provided within the Project area on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road. These improvements would be constructed in cooperation with the City of Fremont, and could include accessible curb ramps, striping, signage, and traffic calming measures, and a sidewalk or path on the south side of Patterson Ranch Road to connect the existing Bay Trail to a proposed Farm Stand area. Utilities to serve the Visitor Center, including water, electrical and sanitary service may be upgraded or replaced within or adjacent to the existing road and trail.



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FIGURE 3-5 PARKING CONCEPT

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 1. 100-car parking lot with bus parking (+/- 1 acre) 2. Open use area (+/- 1 acre) 3. Restroom with flush toilets and sinks / drinking fountains with domestic water 4. Picnic area* (+/- 1/2 acre) and other Site Furnishings Up to 12 tables
 Restroom with flush toilets and sinks / drinking fountains with domestic water Picnic area* (+/- 1/2 acre) and other Site Furnishings
4. Picnic area* (+/- 1/2 acre) and other Site Furnishings
• Up to 12 tables
• Up to 5 BBQ facilities
5. Kiosk/ticket booth with vehicle pullout
6. Up to 10 interpretive panels
7. Up to six wildlife observation platforms (Figure 3-8) with some interpretive panels in
Natural and Recreational Units
8. Fencing
 6' deer or orchard fencing around agricultural fields Two-rail fencing around front of parking and picnic areas
• 4' wire field fence around Visitor Serving Facilities, Farm Yard, and portions of Ardenwood Boulevard and Paseo Padre Parkway – Bay Trail
• 4' straight wire field fencing separating trails from restoration and enhancement areas. These areas would also have "Stay on Trail" signs and "Habitat Restoration – Keep Out" signs
• 6' security fence around portions of Farm Yard buildings
9. 20-car parking lot in Farm Yard Area
10. Preservation and possible (future) adaptive reuse of historic Milk House building in Farm Yard area
11. Possible new Farm Stand designed to 1930s architecture and using materials salvaged from on- site sources
12. Domestic water, sewer, other utilities within Project Area and extension or utility upgrades to Visitor Center
13. Bus turnout and bus shelter along Paseo Padre Parkway, south of Patterson Ranch Road intersection
14. Approximately 4 miles of new, improved or relocated paved multi-use trail and 0.5 miles unpaved foot trails
* No group picnic area provided and no picnic area reservations would be taken.

 TABLE 3-3:
 SUMMARY OF VISITOR-SERVING FACILITIES

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Parking

The Project Plan calls for reconfiguring and relocating existing vehicle parking within the Project area and immediately adjacent areas of Coyote Hills Regional Park, including new parking at a 100-car paved parking lot on the north side of Patterson Ranch Road located approximately 1,000 feet west of the Paseo Padre intersection. Additional overflow/event parking will also be provided on an adjacent upland area. The open use grassy area could potentially be used for up to 100 vehicles for overflow parking during special events.

3. Public Access Trail Construction and Operation

Approximately 4 miles of new, improved and relocated trails are planned for the Park Expansion Project area, with a continuous north-south multi-use trail that traverses the entire area, including the proposed Oak Trail, Patterson Slough Trail (utilizing an easement to connect to Ardenwood Boulevard), Harvest Way Trail (west of the farm lands), and Tule Trail segments (in the ACFCWCD southern area). The trail system would provide connections to the San Francisco Bay Trail along Paseo Padre Parkway and Ardenwood Boulevard, and to existing trails within the adjacent Regional Park (Figure 3-6 – Trail Plan and Table 3-5 - Trail Summary).

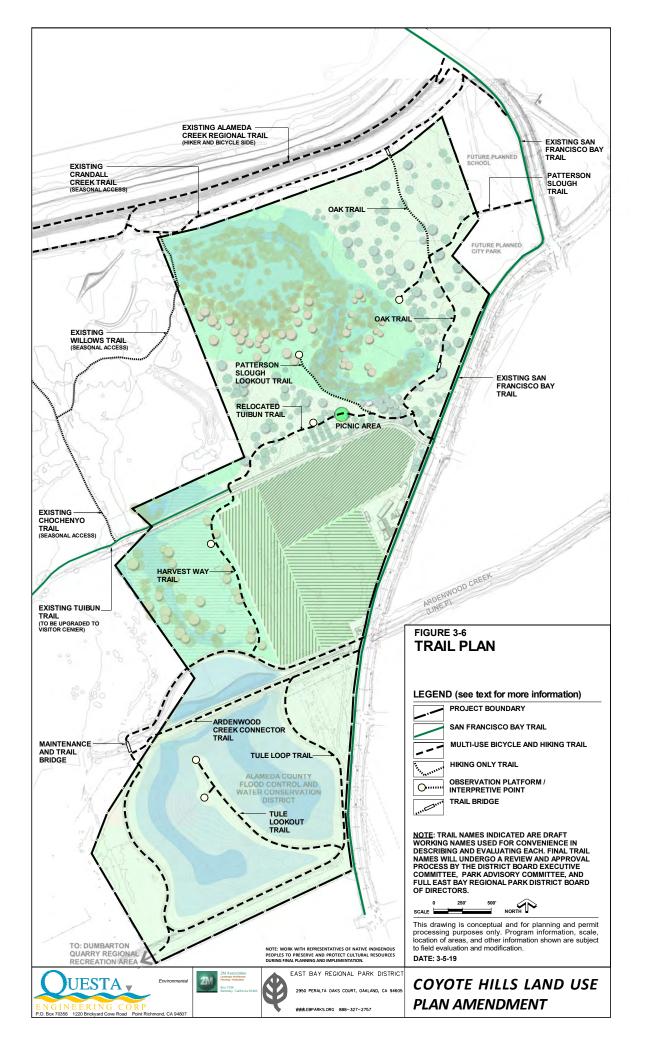
Three types of trails are planned: 1) multi-use bicycle and hiking trails (**Figure 3-7A**); 2) natural surface hiking trails (**Figure 3-7B**); and 3) improved flood control maintenance access roads to be used for trials in the Southern Wetlands Unit (**Figure 3-7C**). The ACFCWCD maintenance roads would also be used for Park maintenance activities and for mosquito control access, in addition to being proposed for multi-use trail usage.

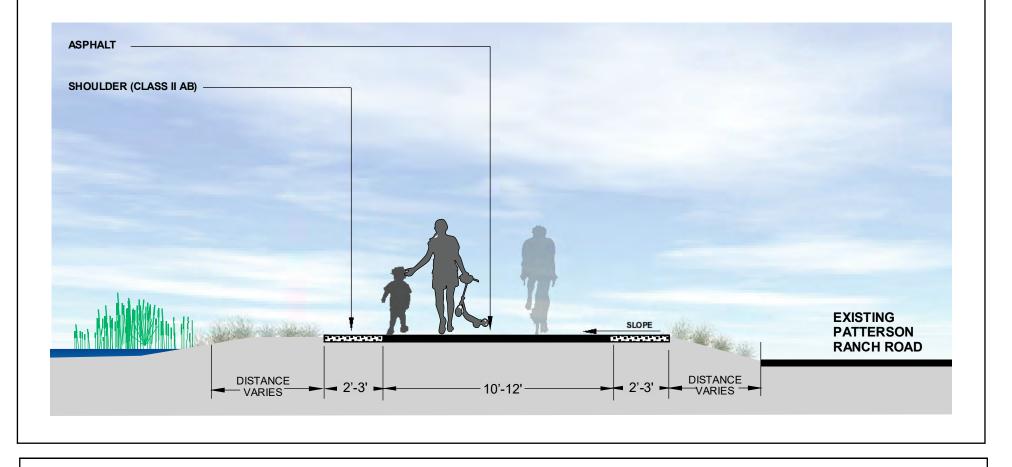
The natural surface foot trails (approximately 0.5 miles total) may be 6 to 8 feet wide, with minimal improvements, and designated for pedestrian use only (no bicycles allowed). Portions of these pedestrian trails may not be fully accessible during periods of heavy rain due to soft soils and/or ponded/flooded conditions. Some foot trails in non-wetland areas may be elevated up to 6 to 8 inches above grade with aggregate base or gravel, and constructed with small diameter culverts or other drainage crossing structures, such as puncheon footbridges, or drainage lenses. Pedestrian-only trails are planned within the more sensitive portions of the Natural Units. The Patterson Slough Lookout Trail is located on an existing dirt farm road with the wildlife observation platform located in the former and now demolished farm worker housing area, as shown on **Figure 3-6** –**Trail Plan**. **Figure 3-8** shows the envisioned wildlife observation platforms. Some trails including the Patterson Slough lookout spur may be subject to seasonal closure.

I ABLE 3-4:	I RAIL SUMMARY	
Working Trail Name and Key Attributes	Multi-Use Trail (miles)	Foot Trail (miles)
Willows Trail, including minor repair and elevation		0.05 (existing)
Crandall Creek Trail		0.05 (existing)
Oak Trail	0.35	0.2
Patterson Slough Trail	0.30	
Patterson Slough Lookout Trail		0.15
Tuibun Trail	0.40 (relocated)	
Tuibun Visitor Center Trail improvements, including widening and elevation	1.1 (existing)*	
Harvest Way Trail	0.30	
Tule Loop Trail, including connection to new Dumbarton Quarry Regional Recreation Area	1.60	
Ardenwood Creek Connector, including 80' pedestrian/vehicular bridge	0.40	
Tule Lookout Trail	0.30	
Total	3.65*	0.45

TABLE 3-4:TRAIL SUMMARY

* Total does not include 1.1 miles of proposed Tuibun Trail improvement west of the Park Expansion Project Area.





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FIGURE 3-7A SECTION: MULTI-USE BICYCLE AND HIKING TRAIL

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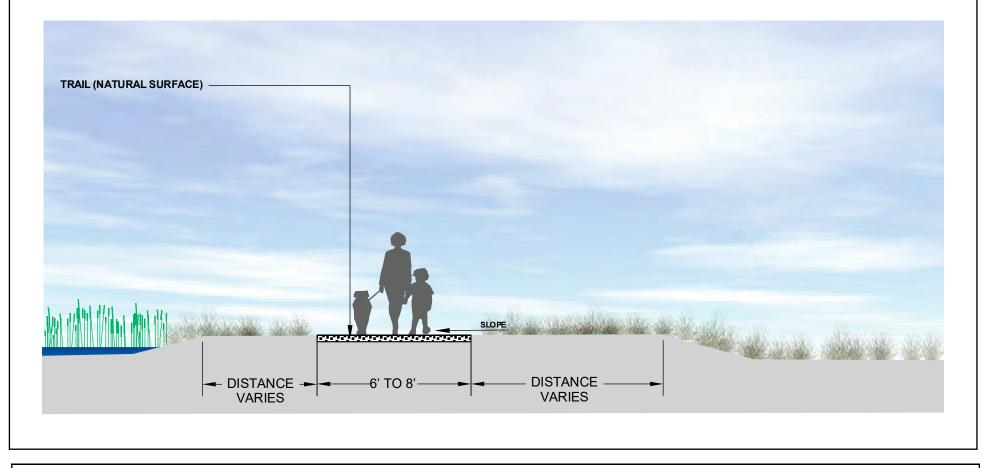


FIGURE 3-7B

SECTION: HIKING TRAIL

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



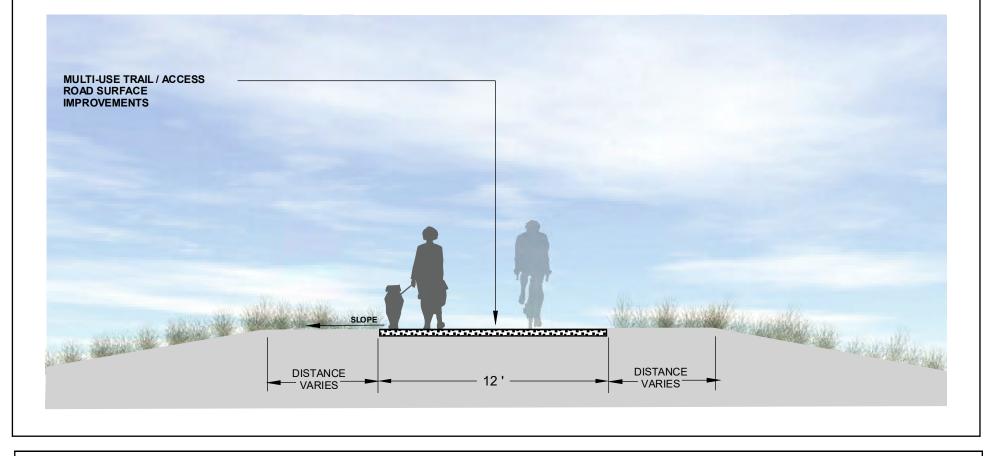
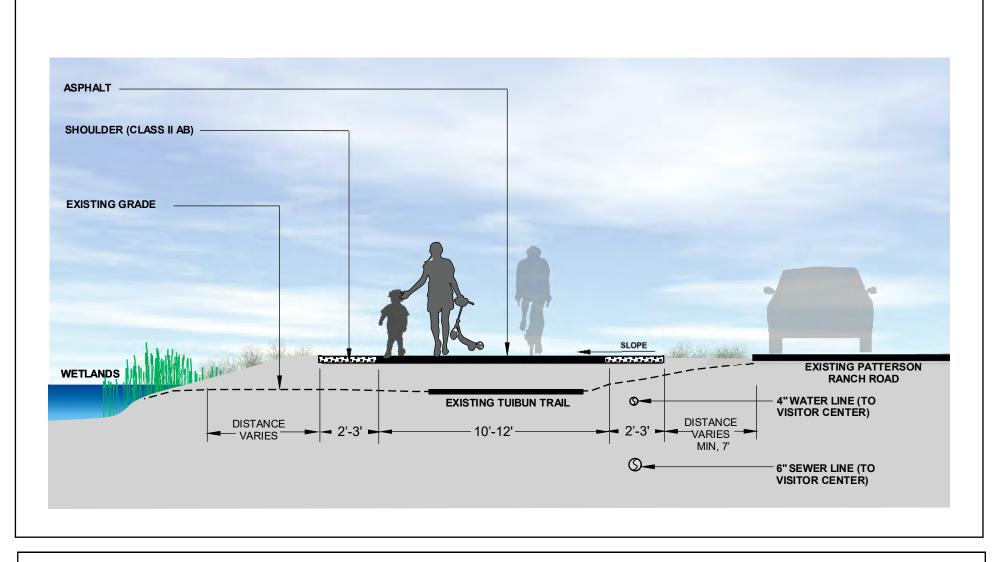


FIGURE 3-7C SECTION: SOUTHERN WETLANDS

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT





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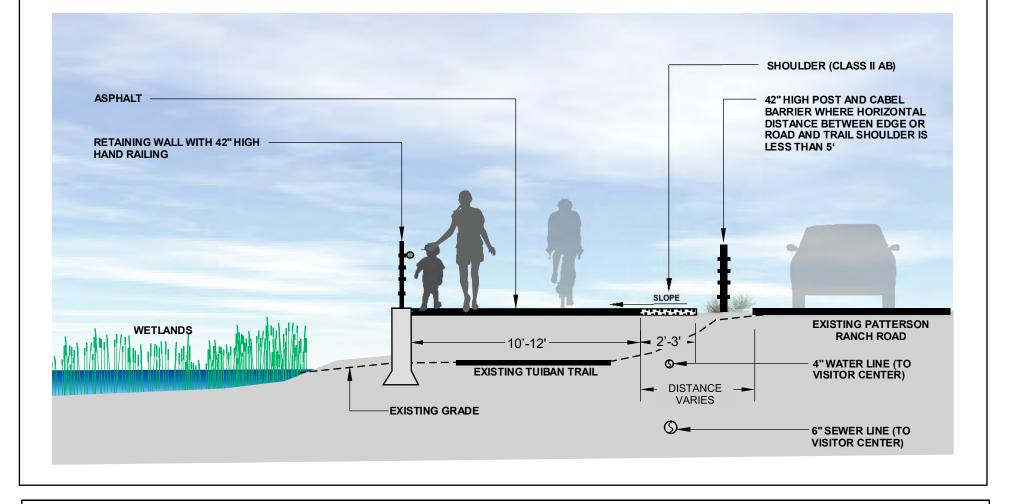
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FIGURE 3-7D

SECTION: TUIBUN TRAIL TO VISITOR CENTER

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FIGURE 3-7E

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

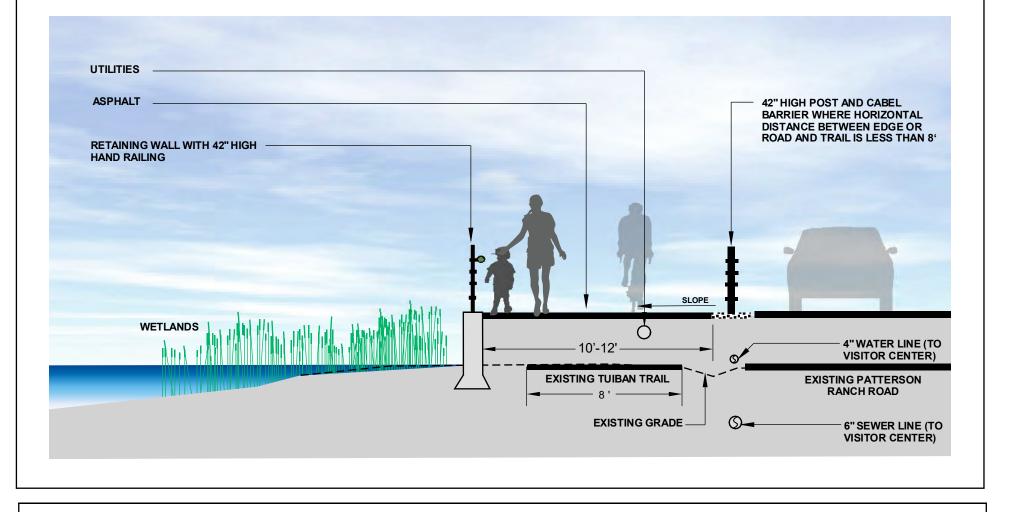


FIGURE 3-7F

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



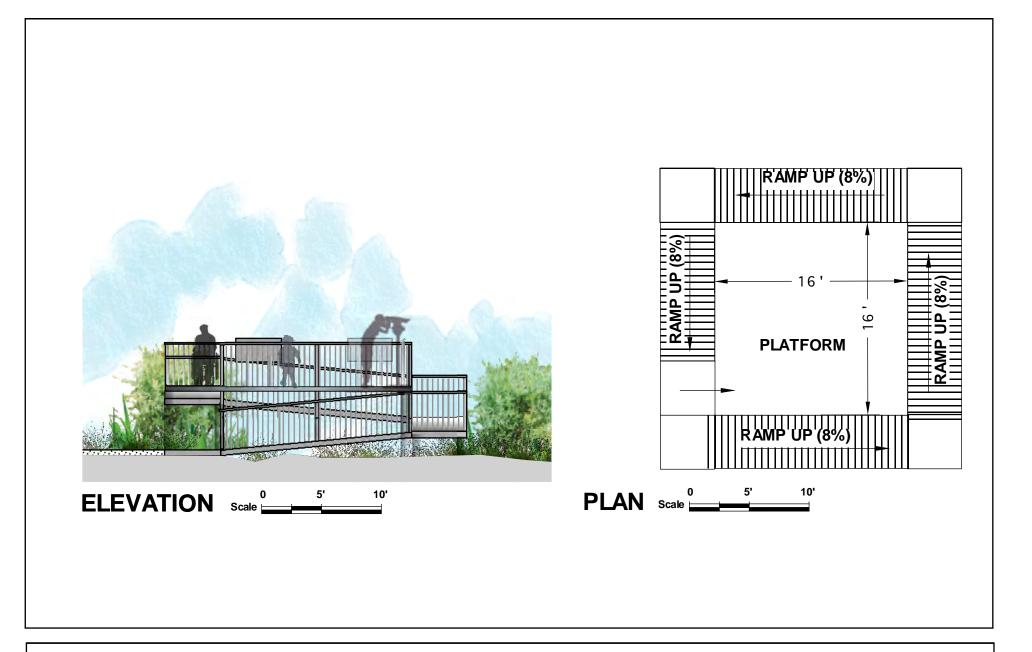


FIGURE 3-8

OBSERVATION PLATFORM

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



The multi-use trails should be fully improved with a 10-foot to 12-foot paved width, designed for all weather use, fully accessible and compliant with Americans with Disabilities Act (ADA). They could have 2- to 3-foot-wide soft, stabilized fine-aggregate or gravel shoulders on both sides of the pathway. The maintenance access roads in the Southern Wetlands Natural Unit would require minimal public access improvements, such as gravel surfacing, signage, and benches. Bicyclists will be permitted on these multi-use trails. Some sections of the Southern Wetland Natural Unit may be paved with asphalt concrete where regional trail connections pass through the area.

The planned trails include approximately 0.4 miles of new natural surface hiking trails, and approximately 3.5 miles of new multi-use trails. Approximately 1 mile of improvements to the existing Tuibun Trail west of the Project Area, and approximately 0.2 miles of existing foot paths requiring minor maintenance and repair are also included in the Project.

Trail Connections

The proposed trail system includes connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, a new connection to the existing Crandall Creek Trail (along the south side of the Alameda Creek Flood Control Channel), providing a new bridge between the Crandall Creek Trail and DUST Trail, improving the Tuibun Trail to the Visitor Center and providing a link to camping opportunities at the future Area Dumbarton Quarry Regional Recreation Area (former Dumbarton Quarry), near and west of the southern end of the Project site. The proposed Trail Plan would also facilitate connections to the City of Fremont planned trails, including the Dumbarton Bridge to Quarry Park Trail along Quarry Road, to the south of the Project area. In addition, maintenance access roads in the southern part of the Project Area would be improved to form a loop trail system around the mitigation wetlands and along Ardenwood Creek, with wildlife observation platforms on a spur near the center of this Unit. Portions of Patterson Slough would be accessible to Park staff, researchers, occasional visitors on guided tours, and mosquito and vector control technicians. In addition to habitat restoration, a multi-use trail would be provided on the east side of Patterson Slough, connecting to the Bay Trail along Ardenwood Boulevard. This trail connection would also provide an opportunity to connect to the planned school and community park east of the Expansion area.

The existing Tuibun Trail, currently located on the immediate north side of Patterson Ranch Road, would be relocated to the north side of the new parking lot, and repaved or rebuilt in other areas. Since the Tuibun Trail is substandard due to trail width, elevation, and experiences seasonal closure due to flooding/ponding, it would be improved to a consistent standard to facilitate increased all season use to the existing Visitor Center, a distance of about 1.1 miles. Fill placement for trail elevation and upgrading in areas adjacent to wetlands along Patterson Ranch Road and the existing Tuibun Trail would use retaining walls or other structures placed at the edge of the existing trail and backfilling within the wall structures to elevate the trail section (see Figure 3-7D, 3-7E, 3-7F). Boardwalk segments may be constructed in some areas. These would be designed to clear-span any low, persistently wet areas within or near the existing trail footprint where trail width and elevation improvements cannot be achieved by use of low retaining walls. Helical piers, pin piers, or other innovative foundation structures would also be used to support any needed boardwalk segments and minimize ground disturbance. Low areas of Patterson Ranch Road that are subject to ponding would also be elevated within the existing roadway footprint, and utility upgrades would be made from Paseo Padre Parkway to the Visitor Center.

Wildlife Observation Platform

Public access features such as wildlife observation platforms (Figure 3-8) or overlooks would be at grade or placed on fill in non-wetland areas, or on elevated decks with ADA compliant ramps. The wildlife observation platforms would use wood or composite materials, be 15 to 25 feet in length and

width, and elevated 5 to 8 feet above adjacent grade on surface placed concrete pier blocks or pin piers. This would minimize soil disturbance and potential damage to any below-ground cultural resources. The wildlife observation platforms would be placed a minimum of 30 feet from the edge of Patterson Slough, with installation of fencing and native landscaping to provide physical and visual barriers and screening, in voluntary compliance with the City of Fremont Watercourse (stream) setback protection ordinance.

Alameda Creek Bicycle/Pedestrian Bridge

Currently, the existing San Francisco Bay Trail runs along Union City Boulevard in Union City and crosses Alameda Creek to Fremont via the 550-foot-long Ardenwood Boulevard vehicular bridge, and continues south along Ardenwood Boulevard and Paseo Padre Parkway past the south end of the Park Expansion area. There are currently no designated bicycle lanes on the bridge, with a 5-footwide sidewalk on the east side of the bridge. Earthen ramps are provided under the bridge on the north and south ends to allow pedestrian access to the bridge sidewalk from the west side. One alternative for crossing of Alameda Creek and to further improve the Bay Trail and bicycle commuter access that may be constructed as part of the Proposed Project, or by/or in cooperation with another local government entity, is retrofitting the existing bridge with a cantilevered pedestrian/bicycle lane on its west side. Pending further structural evaluation of the existing bridge, this could be accomplished for instance by attaching the cantilever beams and other structures to the existing bridge piers, with no new in-channel or channel bottom fill structures requiring placement of new piers within Waters of the US, or wetland areas. The bottom of the cantilever structure would match the bottom cord elevation of the existing bridge to avoid flood flow obstruction. In addition to the cantilever bridge structure, approach ramps and modifications to the existing Alameda Creek channel levee top and Crandall Creek levee system would connect the new cantilever bridge pathway to the existing westbound and eastbound Alameda Creek Trail and the Bay Trail. As noted above, the Alameda Creek Trail in this area ramps down and under the Ardenwood Boulevard Bridge, and the new trail ramp structures would be designed to accommodate this route, including on the north side and on the south side, where the existing levee top is lower in elevation.

4. Cultural Resources Management

Construction of public access and visitor-serving facilities would be designed to minimize excavation to the first several inches associated with clearing and grubbing activities. Most facilities, such as the parking lot, restrooms, and multi-use trails would involve fill importation and placement in nonwetland areas, not excavation. Elevated structures, such as observation platforms, wall footings, and short boardwalk segments along the improved Tuibun Trail would be founded on concrete foundation blocks or pin piers to minimize site and subsurface disturbance.

Trenching for new utility installation and utility up-roads to the Visitor Center, would be to a typical depth of 3 to 4 feet, and a maximum depth of 6 to 7 feet. Most utilities would be located within existing roadway fill. Shallow 1- to 2-foot depressions would be excavated to create seasonal wetlands. Work involving excavation that could potentially impact cultural resources would be carefully conducted under the observation of a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people, to avoid or minimize possible disturbance of buried cultural resources, and to initiate appropriate management actions if buried artifacts or human remains are uncovered.

There are two structures within the Project area that are eligible for listing on the California Register of Historic Structures: 1) the Farm Labor Contractors Residence located immediately adjacent to the upper portion of Patterson Slough, and 2) the Milk House building in the Patterson Ranch Farm Yard area, southwest of the intersection of Patterson Ranch Road and Paseo Padre Parkway. (Please see **Park Development Plan, Figures 3-3A and 3-3B** for historic building locations).

The Farm Labor Contractors Residence is in overall fair to poor condition. The framing and foundation are in fair condition, but the exterior siding, roofing, flooring, windows, doors, interior walls and fixtures are in poor to very poor condition. Removal of the Farm Labor Contractors Residence is proposed because it is located immediately adjacent to willow-lined upper Patterson Slough in an area of high biological and cultural resources sensitivity. Because restoring and rehabilitating, or moving the building by elevating it on blocks and wheels (to relocate it) may result in damages to these resources, this structure would be carefully dismantled and materials salvaged to be available for reuse as an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

The Milk House building is in overall good condition and would be preserved in place. The Milk House building is being considered over a longer period for architectural restoration or adaptive reuse such as a possible farm produce stand or other compatible Park supporting uses. In the interim it would be protected from deterioration and weather damage as part of this Project. For architectural restoration or adaptive re-use, improvements would consist primarily of interior renovation, but also would include installation of utilities such as electricity and domestic water. Improvements to historic buildings would be made consistent with the U.S. Department of the Interior, National Park Service *Historic Preservation Standards and Guidelines*. Farm Yard area improvements in this culturally resource-sensitive area would include 1 to 2 feet of fill placement needed for constructing an approximately 20-car parking area for Farm Stand visitors, fencing with driven fence posts to separate the Milk House from the storage and shop buildings that would continue to be used by the Farm operator and Park District maintenance staff, and landscape and entry area improvements, and a new Park Entry sign. All of these construction activities would have a Cultural Resource Monitor present.

5. Agricultural Land Uses and Associated Activities

The historic Patterson Ranch farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway would continue to be used for agriculture, and are designated as the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit in the LUPA. Small-scale and local agricultural crop production by a Farm lessee would focus on use of Climate Smart farming practices and may provide local organic produce for sale at the historic Farm Yard. Climate Smart agriculture includes actions such as addition of compost to fields to facilitate carbon sequestration, low levels of tillage, and careful and efficient management of crop residues, fertilizers, organic pesticides, and irrigation water. Some of these uses may be conducted as part of a demonstration or pilot study with an environmental education/interpretive component.

In addition to farming in the Agricultural Unit, mowing for hay production and grazing would be allowable uses in the Patterson Slough, oak savanna and grasslands and the Western Wetlands areas; but not within seasonal wetlands, willow sausal or mixed riparian forest areas.

Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. Other farm use-related improvements proposed for this area may include extension of utilities to serve the complex, including a new 1" domestic water line to serve the building, sewer, electricity/gas, and construction of a 20-vehicle parking area occupying about 1/3 acre of land, to serve the Farm Stand. Existing fencing may be modified to improve site management and security and enhance the visual character of the area. New deer fencing would also be installed in the agricultural area to minimize deer browse damage.

6. Surface Water and Groundwater Management

As an important element of the Project, the Park District would continue to coordinate and cooperate with its partner local agencies in protecting, monitoring, and managing the surface water

and groundwater resources within Coyote Hills Regional Park, including within the Park Expansion area. The partner agencies and areas of cooperative and shared water management responsibility include:

- Alameda County Flood Control and Water Conservation District (ACFCWCD) Flood control and water quality management of Line P/Ardenwood Creek and Line K/Crandall Creek
- Alameda County Water District (ACWD) Groundwater management, including monitoring and management of shallow zone salinity, and agricultural and habitat restoration irrigation wells
- Alameda County Mosquito Abatement District (ACMAD) Management of mosquitoes and other potential disease vectors in ponded areas, especially along and within Patterson Slough and west of the Project area
- Alameda County Environmental Health (ACEH) Water quality of domestic water wells and onsite wastewater disposal systems regulation
- Alameda County Resource Management District (ARCD) Assistance in management of agricultural operations, including soil and water quality issues associated with farming, grazing, and habitat restoration
- City of Fremont (City) Department of Engineering and Planning Management of stormwater runoff, grading and erosion control, hazardous materials/waste management, and flood plain regulation

General Project activities include facilitation of access to surface water bodies for monitoring and management, as well as providing continuing access to monitoring wells and irrigation wells, and sharing monitoring information collected by the Park District Staff.

Specific Project activities described in more detail below include:

- ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area (WMA) Project
- Stormwater control facilities, including parking lot bioswales and rain gardens
- Abandoned well location and destruction
- Abandoned septic tank location and destruction
- Low level pesticide residue evaluation and as-needed remediation and removal

Southern Wetlands Natural Unit-Phase 1 Flood Control and Wetland Mitigation Project

The ACFCWCD Project includes constructing a Flood Control and Wetlands/Habitat Mitigation and Public Access component covering approximately 50 acres that is located south of Line P/Ardenwood Creek, within the Southern Wetlands Natural Unit.

The Park District will continue to coordinate this work with ACFCWCD, who would be the lead agency responsible for this construction and operation. This work is a continuation of Phase I of the ACFCWCD Flood Control Zone 5 Line P Project. The Line P Phase 1 Project was completed in the fall of 2017 and involved making channel flood flow conveyance improvements (channel widening and deepening to original design grades) to Ardenwood Creek, from upstream beginning at Tupelo Street to approximately 2,200 feet downstream of Paseo Padre Parkway west of the Park Expansion

area. Phase 2 of the Project involves making channel conveyance improvements along Line P through the existing Coyote Hills Regional Park "J-Pond" area, to its outlet at the tide gate discharge culverts in the Alameda Creek south levee, north of the Visitor Center. Phase 2 is a separate project and is not addressed in this CEQA document.

The Phase I continuation work involves grading two, 3- to 4-foot-deep off-channel basins that will be connected to Ardenwood Creek via two culvert crossing structures for inlet and outlet flow controls. Each crossing consists of four 48" diameter reinforced concrete pipes, with sluice gate control at one of the four pipe barrels at the outlet structure. The two basins will occupy about 30 acres, as measured at their rim elevations. The basins will serve as temporary floodwater detention structures during periods of high flow in Line P/Ardenwood Creek.

The basins will be planted and seeded using a mix of native seasonal wetlands and emergent marsh species, including species that are saline-alkali tolerant. The created wetlands will provide mitigation credits for other ACFCWCD flood control and channel maintenance projects and operations in Zone 5, including maintenance projects along Alameda Creek. Some of the graded earthen material will be relocated within the 50-acre parcel to create oak savanna uplands, with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. The Flood Control and Wetlands Habitat Mitigation project is shown conceptually on **Figures 3-3A and 3-3B, Park Development Plan**.

The maintenance roads would be available to the Park District and ACFCWCD to improve, maintain, and operate as multi-use trails. This mitigation area would be improved and maintained over an initial 7- to 10-year period, during which it will be operated and managed by the ACFCWCD as a Wetlands / Habitat Mitigation Bank. Following successful establishment of the Mitigation Bank, including its created wetlands and enhanced habitat, and its demonstrated success in being self-sustaining and meeting all Mitigation Bank establishment criteria, and after all the Mitigation Bank credits have been used, the area would be turned back over to the Park District for full integration and management as part of Coyote Hills Regional Park.

Project Area Stormwater Control Facilities

Construction of the Open Use area and 100-car parking lot, restroom, and picnic area facilities in the Ranch Road Recreation Unit would also include the grading of bioswales (broad-bottomed shallow and vegetated drainageways) and rain garden facilities to capture and treat stormwater runoff prior to release to the west side of the Patterson Slough mixed riparian/willow restoration area. Grading volumes are estimated to be 200 to 300 cubic yards of earthwork with maximum cut depths of 2 feet below existing grade. All stormwater runoff design and construction work would be completed consistent with City of Fremont Municipal Code section 18.210.110, "Development design requirements (stormwater)".

Destruction of Abandoned Wells

There are eight known or suspected abandoned and non-functioning wells within the Park Expansion area, or immediately adjacent to it. Some of the abandoned wells have no surface infrastructure, such as a standpipe or pump, and are difficult to locate in the field. Their approximate locations are based on ACWD records. As part of final engineering, and during construction and associated construction management, the Park District would coordinate with ACWD to confirm the location of abandoned wells, identify any previously unknown abandoned wells, and develop and implement plans to destroy these abandoned wells following applicable ACWD permitting

regulations and destruction guidelines. This would involve pulling well pumps and casings and any aboveground stand pipes and grouting the wells closed.

Abandon and Destroy Septic Tanks and Leachfields

The historic Contractors Farm House and the now demolished Farm Labor Housing buildings were located in rural, unincorporated Alameda County when they were built. They had septic tanks and leachfield wastewater disposal systems. Per Alameda County Onsite Wastewater Treatment System Code, Section 9, these abandoned systems would be field-located, and if found, destroyed. This would involve removing the septic tank lid, pumping the tank chambers, perforating the tank bottom, and backfilling the tank with pea gravel or drain rock and topsoiling. Leach lines would not be removed. This work would be done under a County-issued permit.

Low-Level Residual Pesticide Contaminated Soil Remediation

Portions of the Project Area may contain surface soils with low levels of residual pesticide compounds, which are a relic from when this area was intensively farmed. Based on the results of previous testing, residual levels are such that they do not create a health risk to construction workers, Park staff, Park visitors, or nearby businesses or residences, but could have potential ecological food chain effects through uptake of soil-borne insects in wetland areas. Follow-up sampling and testing would be completed in areas where new seasonal wetlands are proposed. Depending on the findings, shallow soil excavation and removal, and transport of the soil to an approved facility permitted to accept the soil would be completed. The removed soil may be treated as a non-regulated or non-hazardous waste material.

7. Utility Upgrades and Extension

Domestic Water

Currently there is no potable water service to the Project Area. The Visitor Center is served via a 3inch water line that crosses diagonally from Paseo Padre Parkway in the vicinity of Kaiser Avenue through the fields north of Ardenwood Creek to Patterson Ranch Road in the vicinity of the existing kiosk where it runs up the road to the Center. This system is considered unreliable and under-sized, especially for fire control purposes. The Proposed Project would include a new 6-inch water line from the ACWD water main along Paseo Padre Parkway, up the north side of Patterson Ranch Road, to the Visitor Center, a distance of about 8,000 linear feet (LF). A new 2- inch lateral water line would run to a proposed new restroom facility to the north, and to the proposed picnic area, a distance of about 1,500 to 1,600 LF from the Paseo Padre Boulevard point of connection.

A new 2-inch potable water line would also be installed within the Farm Yard parking area to serve the existing Milk House building, about 500 - 600 LF. The water lines would be in 2 to -3-foot wide by 3- to 4-foot-deep utility trenches compliant with City of Fremont and ACWD standards.

Irrigation Water

Temporary irrigation, including provision of a temporary irrigation water source and supply, storage, and irrigation distribution system, would be provided as part of the Project to aid in the establishment of native trees and shrubs within the mixed riparian and oak savanna restoration areas. Approximately 6,000 to 8,000 trees may be planted over a three- to five-year period, including live willow stake planting in the willow sausal restoration area. The planted native trees would require seasonal irrigation during a two- to three-year plant establishment period. Total annual irrigation volumes are estimated to be about 3.0 to 4.0 acre-feet of water. Tree planting would be staggered over a 3-year period, so actual annual use may be less than this.

Sources of irrigation water that might be used include either the existing farm irrigation well in the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit and/or repairing and using an existing well located in northeast corner of the Patterson Slough Natural Unit, or using available reclaimed or domestic water.

Wastewater

The current wastewater system consists of a 4-inch diameter sanitary sewer force main that runs about 8,000 feet along Patterson Ranch Road from the Union Sanitary District (USD) sewer main along Paseo Padre Parkway to the Coyote Hills Regional Park Visitor Center. The wastewater system includes a lift station that is located below the Visitor Center. This wastewater system would be reconstructed within Patterson Ranch Road, upgrading to a 6-inch line with a new pump station.

A new, 2- or 3-inch diameter pressurized wastewater pipeline would be installed parallel and adjacent to the re-constructed force main to serve the restroom building in the Project Area. This is a distance of about 1,400 - 1,500 LF from the USD Paseo Padre Parkway sanitary sewer main. The restroom wastewater system would include a duplex (backup) pump station. The sewer line would also be located within a utility trench compliant with City of Fremont and applicable USD codes and standards, typically 3 feet wide and 5 feet deep along much of Patterson Ranch Road, but possibly up to 6 or 7 feet in depth near Paseo Padre Boulevard. Since the Park Expansion area is not currently within the USD service area, approval would also be needed from the Alameda County Local Agency Formation Commission (LAFCO).

Other Utilities

Other "dry" utilities that would be installed within and above the water line in the joint trench per City code would include: a) 2" gas line, b) two 4" telecommunications conduits, c) 4" electrical conduit, and d) 2" fire signal conduit. These would also run from the vicinity of Paseo Padre to the Visitor Center, with select laterals (electric service) to the proposed restroom facility.

8. Climate Change and Sea Level Rise Adaptation

There are four objectives that would be implemented in the LUPA and Park Development Plan regarding climate change adaptation:

- 1) Ensuring that existing and proposed improvements are resilient to changing climate, including sea level rise, rising ground water tables, potential soil and groundwater salinization, and increased flood risk to infrastructure.
- 2) Ensuring that District activities occurring within the expansion plan area, consistent with the overall Coyote Hills Regional Park, are appropriate management actions to reduce Park contributions of greenhouse gases and other climate changing actions, and proactively taking actions that trap or sequester atmospheric carbon.
- 3) Providing opportunities to educate Park visitors about climate change, as well as cooperating with climate change scientists to make parklands available for research and demonstration projects.
- 4) Providing opportunities for active transportation to, from and within the Park by constructing facilities for bicycle and pedestrian use, as well as accommodating transit where appropriate.

Site program components that address climate adaptation include Climate Smart farming activities, as well as the proposed program of riparian and oak savanna tree planting for carbon fixing or carbon sequestration. Other opportunities include planning for installation of electric vehicle charging stations in the parking lot, should the Park District develop a pilot program in the future.

Climate Smart management and adaption also involves constructing facilities and improvements to elevations above those subject to flooding and ponding, as well as developing improvement and restoration plans that are cognizant of and adaptive to expected increases in shallow zone groundwater levels, increased areas of ponding/flooding and poor drainage, and potentially increased soil and water salinity and sodium levels. The plant palette would include local, native plant species that are site appropriate and tolerant plant materials capable of thriving under changing site conditions.

A proposed robust, science-based soil and surface and groundwater monitoring program would aid in climate change adaptive management decision-making. Baseline conditions were documented during the Project site investigations and would form the basis of the proposed long-term monitoring program. Smart, wireless and web-based agricultural sensors may be used to remotely monitor organic matter (soil carbon), moisture, soil oxygen, salinity, pH, and other important soil and hydrologic properties, and the record keeping and database would provide the information needed to support adaptive management decision-making.

9. Visitor-serving Facilities and Trail Grading and Disturbance

Preliminary estimates of grading, trenching and fill quantities are provided in this section. Quantities and measurements are approximate. Exact Visitor-Serving facility footprints and exact trail lengths, widths, and fill depths would be determined during future Park Design Development with some Plan elements, such as building, grading, and stormwater management, subject to review and approval by the City of Fremont. A range of lengths, widths and fill thickness was used to bracket and quantify potential disturbance areas associated with Proposed Project features, along with a range of expected fill volumes.

Construction of trails, parking areas, and visitor facilities, and installation or upgrading of utilities, would involve clearing and grubbing 2 to 3 inches of topsoil, grading, trenching and local cut or imported fill placement and compaction. Fill depths would typically not exceed 4 feet with most cuts (except utility trenches) limited to 2 feet.

Construction of visitor-serving facilities (farm yard area, picnic area, restrooms, and parking) would disturb between 141,000 and 171,000 square feet, and place between approximately 6,200 (0.15 acres) and 12,500 (0.30 acres) cubic yards of fill to a maximum depth of 4 feet. Construction of new trails and repair, re-construction, or relocation of existing trails would disturb between approximately 310,900 and 366,600 square feet (7.1 to 8.4 acres), and place between 13,000 and 20,400 cubic yards of fill to a maximum depth of 3.0 feet. Trenches for utility installation would be approximately 9,000 to 9,800 feet in length, and have a maximum depth of 6-feet. For the Project, total fill volume associated with parking, trails and visitor-serving facilities would be in the range of about 19,500 to 33,000 cubic yards. Total disturbance, if all Project Trail and Visitor-serving features were constructed at the same time, would be between approximately 452,000 sq. ft. (10.3 acres) and 537,600 sq. ft. (12.3 acres). **Tables 3-5** and **3-6** summarize fill and disturbance associated with Trails and Visitor-serving Facilities.

Working Area Name	Feature Size (SF)	Fill Depth (ft.)	Fill Volume (CY)
1. Parking Area and Restroom	48,000 - 62,000	1.5-2.5	2,700-5,700
2. Picnic Area	18,000 - 23,000	1.0-2.0	700-1,700
3. Overflow Parking	43,000 -47,000	1.0-2.0	1,600-3,500
4. Farm Yard Parking and Road	23,000 -27,000	1.0-1.5	850-1,500
5. Other Farm Yard Use Areas	9,000 - 12,000	1.0-1.5	350670
Total	141,000-171,000	N/A	6,200-12,500-

TABLE 3-5:VISITOR SERVING FACILITIES -DISTURBANCE AND FILL SUMMARY

TABLE 3-6:TRAIL DISTURBANCE AND FIL	L VOLUMES
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Working Trail Name	A Trail Length (LF)	B Fill Width (ft.)	C Fill Depth (ft.)	D Fill Disturbance (SF)	E Fill Volume (CY)
Willows Trail (existing foot) *1	600	7-8	0.45	4,200-4,800	60-90
Crandall Creek Trail (existing foot tail with 20' bridge) ^{*1}	500	7-8	0.34	3,500-4,000	40-60
Crandall Creek Trail Connector (existing foot)	1,100	11-12	1.5-2.0	12,000-13,200	680-980
Oak Trail and Patterson Slough Trail (multi-use)	2,700- 2,900	17-19	1.5-2.0	46,000-55,100	2,600- 4,000
Patterson Slough Overlook Spur (existing foot)	600	9-10	1.0-1.5	5,400- 7,000	200-390
Patterson Slough West Spur (existing foot)	500	9-10	0.5-0.7	4,500- 6,000	85-155
Tuibun Trail (relocated - multi-use) *2	2,000- 2,200	17-19	2.0-2.5	35,000- 40,000	2,600- 3,700
Tuibun to Visitor Center Trail improvements (improved - multi-use) *3	5,300- 5,500	9-10	1.5-2.0	53,000-66,000	2,950- 4,900
Harvest Way Trail (multi-use)	1,600- 1,800	17-19	2.5-3.0	27,200-34,200	2,500- 3,800
Marsh View Loop Trail (multi-use) *4	8,500- 8,900	11-12	0.3-0.4	93,500- 108,000	1,050- 1,600
Ardenwood Creek Connector (multi-use) *4	2,000- 2,200	11-12	0.3-0.4	22,000-26,400	250-390
Tule Spur (multi-use) *4	1,600- 1,800	11-12	0.3-0.4	17,600-21,600	200-320
Total	27,000- 28,600	N/A	N/A	310,900- 366,600	13,215- 20,385

Notes:

- *1) Minor improvements to existing foot trail, including re-grading and gravel surfacing in places
- *2) Existing Tuibun Trail along Patterson Ranch Road to be relocated to the north within LUPA

*3) Existing Tuibun Trail West to be elevated approximately 1.5 feet to 2.5 feet using fill placed between retaining walls with some boardwalk structures

*4) Trails in Southern Wetlands to be located on Flood Control District constructed maintenance access roads. Signage and minor gravel surfacing may be required.

Restoration Grading and Disturbance

Grasslands and Oak Savanna

To facilitate the control of existing invasive weedy areas and the establishment of native grasses and forbs, and to create a more complex micro-topography for habitat diversity, oak savanna and grassland restoration would include the selective placement of 6 inches to 1 foot of clean imported soil, and 2 to 3 inches of compost. The compost addition will also facilitate carbon sequestration. Because of the large size of these restoration areas, clean soil and compost importation and placement would initially be limited to zones or strips along the Fremont Unified School District future school parcel and the City of Fremont future park parcel, paralleling Ardenwood Boulevard, as well as along the north side of the proposed parking lot, open use area, and picnic and landscaped areas, paralleling Patterson Ranch Road. The zone where imported fill/compost would initially be placed parallels Ardenwood Boulevard from approximately 250 to 700 feet wide and 2,000 to 2,500 feet long. Proposed imported clean fill in this area would range from 15,000 to 20,000 cubic yards, with proposed compost additions ranging from 8,000 to 10,000 cubic yards. The zone paralleling Patterson Ranch Road ranges in size from a width of 200 to 400 feet, and a length of 1,000 to 1,500 feet. Initial imported clean fill in this area would range from 8,000 to 10,000 cubic yards, with proposed compost additions ranging from 4,000 to 5,000 cubic yards.

The proposed grassland/oak savanna restoration work also includes selectively scraping or removing 2 or 3 inches of weed-seed laden topsoil and placement under the proposed parking lot and open use area (up to 20,000 cubic yards), and importing and placing 6 inches to 1 foot of clean suitable fill/topsoil and 2 to 3 inches of compost over the existing soil surface in grassland/oak savanna restoration areas to reduce weed competition. Total imported fill/topsoil volume is estimated to range from 30,000 to 50,000 cubic yards. Compost addition to oak savanna areas is estimated to range from 15,000 to 25,000 cubic yards.

The City of Fremont and Fremont Unified School District have expressed an interest in evaluating the possibility of a potential "land swap" with the Park District in order to form a parcel to meet State standards to construct an elementary school. The Park District has not agreed to any such deal, however, should this land swap occur, Grassland and Oak Savanna planned at the project area abutting the Project's northeastern boundary and School/City property could shift southeast towards Paseo Padre Parkway. The acreage of restored habitat would remain unchanged. Regardless of the outcome of a potential future land swap in this area, the City and School District will be responsible for evaluating the environmental effects of developing their parcel through a separate CEQA process.

Seasonal Wetlands

Seasonal wetlands enhancement achieved by shallow (1 to 2 feet deep) excavation is proposed to occur in two areas near the east and west ends of Patterson Slough within the Patterson Slough Natural Unit, as well as within the Western Wetlands Natural Unit. Approximately 3 to 5 acres of seasonal wetland excavation and grading are proposed for these areas, resulting in cut volumes of between 5,000 and 16,000 cubic yards (each area). All seasonal wetlands excavation and creation would occur in areas that have not been identified as being Corps of Engineers Jurisdictional Wetlands. Cut soil volumes from seasonal wetlands enhancement grading would be placed to elevate

the open use area, parking lot and picnic/landscape area or placed within the Farm Yard area. Grading for habitat restoration and flood control purposes in the Southern Wetlands Natural Unit was previously discussed under the section heading 6.0 "Surface Water and Groundwater Management".

Because of nearly ideal soils and shallow groundwater conditions, only minimal grading and disturbance would be performed to restore and enhance the willow sausal and mixed riparian forest along Patterson Slough. Invasive weed control in areas of proposed mixed riparian forest and willow sausal would be achieved by mowing, grazing, and selective herbicide application and compost placement, with eventual full control achieved by shading provided by a dense tree canopy.

4 ENVIRONMENTAL EVALUATION

This chapter consists of an evaluation of the environmental impacts of the proposed Coyote Hills Restoration and Public Access Project. In accordance with Appendix G of the CEQA Guidelines, the potential effects of the Proposed Project on the following issues are analyzed in Chapter 4 of this EIR:

- ♦ Biological Resources
- ♦ Cultural and Tribal Cultural Resources
- ♦ Transportation

The following issues were determined by the Initial Study (IS) to have no impacts, or impacts that would be less than significant with implementation of mitigation measures identified in the Initial Study, and are therefore not included in the EIR.

- ♦ Aesthetics
- ♦ Agriculture and Forest Resources
- ♦ Air Quality
- ♦ Geology and Soils
- ♦ Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- ♦ Hydrology and Water Quality
- ♦ Land Use and Planning
- ♦ Mineral Resources
- ♦ Noise
- ♦ Population and Housing
- Public Services
- ♦ Recreation
- Utilities and Service Systems

Format of the Environmental Evaluation

Each section in Chapter 4 follows the same format and consists of the following subsections:

- The **Regulatory Framework** subsection contains an overview of the federal, State, and local laws and regulations applicable to each environmental review topic.
- The **Existing Conditions** subsection describes current physical conditions with regard to the environmental factor reviewed.
- The **Standards of Significance** subsection tells how an impact is determined to be significant in this EIR. Where noted, these standards are based on the CEQA Guidelines and other regulatory criteria.
- ♦ The Impact Discussion gives an overview of potential impacts of the Project and explains why impacts are found to be *significant*, *less than significant*, or *no impact*.

• The **Impacts and Mitigation Measures** subsection numbers and lists identified impacts and recommended measures that would mitigate each impact, where such measures are available.

Cumulative Impact Analysis

The CEQA Guidelines require consideration of the potential cumulative impacts that could result from a Proposed Project in conjunction with other projects. A cumulative impact consists of an impact created as a result of the combination of the Proposed Project evaluated in this EIR together with other current and reasonably foreseeable future projects causing related impacts. Cumulative impacts are considered for each issue separately (see 6.5 Cumulative Impacts). The following proposed, approved, or under construction projects in the vicinity of the Project site are considered in the EIR's cumulative impact analysis.

Proposed Projects

Four office buildings on Campus Court. Four office buildings on Campus Court, east of Paseo Padre Parkway and the Project site, were entitled through the Ardenwood Technology Park Planned District Amendment.² The four buildings would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Replacement of Agricultural Well on Project Site. The Park District is in the process of replacing an existing, nonfunctional agricultural well on the south side of Patterson Ranch Road with a deeper well. Although this will occur on the Project site, it is a separate project to support an existing agricultural operation that has already been initiated, and is not addressed in this CEQA document except in the analysis of cumulative projects.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure will have a maximum of 8,700 square feet, and will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open views of the nearby marsh. Planning and conceptual design for the new Visitor Center are currently underway.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was

² Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

prepared. This work involves grading two, 2- to 3-foot-deep off-channel basins that will be connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District Project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under final phases of construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This project involves development of the former Dumbarton rock quarry, located south of the Project site, into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard. This project is under construction, and is expected to open in late 2019.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.³ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

³ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

4.1 Biological Resources

This section provides the environmental and regulatory background necessary to analyze the impacts of the proposed Coyote Hills Restoration and Public Access Project to biological resources. It provides an overview of the current **regulatory framework**, describes **existing conditions**, and analyzes the **potential impacts** of the project. This section contains information from the *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report* prepared by Questa, with Dr. Sam McGinnis (Wildlife Biologist), and Jane Valerius (Plant Ecologist/Wetlands Scientist) for the Proposed Project⁴, as well as information provided in the *Patterson Ranch Planned District Final EIR*, and other published and unpublished sources. Preparation of this report included a records search, field mapping, and a focused field review of potential biological impacts.

Regulatory Framework

This section provides a summary of the regulatory framework pertaining to the biological resources at the Coyote Hills Project Area.

Federal Laws and Regulations

Clean Water Act Section 404 and 401

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, Sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports), and mining projects. Section 404 of the CWA requires a federal license or permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

In general, a Corps permit must be obtained before placing fill or grading in wetlands or other waters of the United States. At Coyote Hills, fill or grading in Corps jurisdiction could potentially result from alteration or reconfiguration of seasonal and perennial wetlands for habitat enhancement and restoration activities, or activities associated with trail and bridge construction over existing waterways. Before issuing a permit for such activities, the Corps would be required to consult with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) under Section 7 of the Endangered Species Act (discussed below) if the action subject to Clean Water Act permitting could result in take of federally listed species.

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate, that the discharge would comply with the applicable effluent limitations and water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with

⁴ Questa Engineering Corporation. Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report. September 2018.

the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The Proposed Project is under the jurisdiction of the San Francisco Region RWQCB. The RWQCB's Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) and the California Water Code define Waters of the State as follows: "Waters of the State' means any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code §13050 (e))." This definition is broader than that of "waters of the United States" and consequently should always be considered when determining impacts upon water resources.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 prohibits federal agencies from authorizing, permitting, or funding any action that would jeopardize the continued existence of a plant or animal species listed or a candidate for listing as Threatened or Endangered under the FESA. If a federal agency is involved with a proposed action or project that may adversely affect a listed plant or animal, that agency must enter into consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7(a) (2) of the FESA.

Activities that could potentially result in take of a federally listed threatened or endangered species require an incidental take authorization resulting from a Section 7 consultation or a Section 10 permit. For restoration and public access improvements at Coyote Hills, a Section 7 consultation with USFWS and NMFS would be initiated by the Corps prior to issuing a Section 404 permit for fill or grading in wetlands or other waters, for public access facilities such as trail crossings or bridges, if found to be needed. Section 7 consultations may result in the issuance of a Biological Opinion specific to the project or in the project being appended to an existing Programmatic Biological Opinion for a given listed species.

Rivers and Harbors Act

The Corps has jurisdiction over "navigable waters" under Section 10 of the Rivers and Harbors Act of 1899. "Navigable Waters of the U.S.", as defined in 33 CFR Part 329, are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water body, and is not extinguished by later actions or events that impede or destroy navigable capacity. The upper limit of navigable water is at the point along its length where the character of the river changes from navigable to non-navigable, such as at a major fall or rapids. Tidal habitats below Mean High Water (MHW)⁵ also fall under Section 10 jurisdiction. The definition of "navigable waters of the U.S." under 33 CFR Section 329.1 states that this definition does not apply to authorities under the Clean Water Act defined under 33 CFR Parts 323 and 328. Alameda Creek Flood Control Channel is considered navigable water, and a cantilevered walkway attached to the existing Ardenwood Boulevard crossing may potentially be subject to this review, if it affects navigability, including by non-motorized boats.

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) makes it unlawful to possess, buy, sell, purchase, barter or, "take" any migratory bird listed in Title 50 of the Code of Federal Regulations Part 10. "Take" is defined as possession or destruction of migratory birds, their nests, or eggs. Disturbances that causes nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend would be in violation of the MBTA. Most of the native bird species that occur in the region of the Coyote Hills Regional Park are covered by this Act; therefore,

⁵ MHW is the extent of the line on the shore reached by the plane of the mean (average) high water established by survey with reference to the available tidal datum averaged over a period of 18.6 years.

any activity related to restoration and/or public access improvements that is conducted during the nesting season (January 1 through August 31) must be implemented in a manner that complies with this Act.

State Laws and Regulations

Porter-Cologne Water Quality Control Act

Waters of the State are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a Proposed Project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to Waters of the State, the RWQCB has the option to regulate such activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

California Endangered Species Act

The State of California enacted similar laws to the FESA, in the California Native Plant Protection Act (NPPA) in 1977, and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of "threatened" and "endangered" species. The State converted all animal species listed as "rare" under the FESA into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. CDFW implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the CEQA review process, CDFW is given the opportunity to comment on the potential of the Proposed Project to affect listed plants and animals.

The Natural Community Conservation Planning Act

The Natural Community Conservation Planning (NCCP) Act of 1991 represents an effort by the State of California, and numerous private and public partners, to broaden its orientation and objectives beyond those of the CESA and FESA (refer to discussions above). The primary objective of the NCCP Act is to conserve natural communities at the ecosystem scale while accommodating compatible land use. The NCCP seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities, including key interests in the process. There are no NCCPs that cover the Project area.

Fully Protected Species & Species of Special Concern

The classification of "fully protected" was CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at Section 5515, amphibian and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with "fully protected" species states that these species "…may not be taken or possessed at any time

and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow CDFW to authorize take resulting from recovery activities for State-listed species. Implementation of restoration and public access improvements at Coyote Hills must be conducted in a manner that avoids take of listed species.

Species of Special Concern (SSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to CDFG because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. ⁶ This designation is intended to result in special consideration for these animals by CDFG, land managers, consulting Biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

California Fish and Game Code Sections 3503 & 3513

According to Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory, non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protects endangered and rare plants from take.

California Native Plant Society

Although not a "State Agency, the California Native Plant Society (CNPS), a NGO, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version. This inventory is often used in CEQA analysis and where an impact is identified to a plant on this list it most often requires the development of a Mitigation Measure that in effect becomes similar to a permit condition.

The Inventory assigns plants to the following categories:

- 1A Plants Presumed Extinct in California
- 1B Plants rare, threatened, or endangered in California and elsewhere
- 2 Plants rare, threatened, or endangered in California but more common elsewhere
- 3 Plants about which information is needed-a review list
- 4 Plants of limited distribution-a watch list

⁶ The term Species of Special Concern (SSC) is defined in the CDFW CNDDB Special Animals List, as updated.

Threat Ranks. The CNPS Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.⁷

- 1 Seriously threatened in California (high degree/immediacy of threat)
- 2 Fairly threatened in California (moderate degree/immediacy of threat)
- 3 Not very threatened in California (low degree/immediacy of threats or no current threats known)

Impacts to plants on lists 1 and 2 are typically assumed to meet CEQA's threshold of significance. This EIR considers plants listed as 1 and 2 as Special Status species. Very few list 3 and 4 plants meet the definitions of Section 1901 Chapter 10 Native Plant Protection Act or Sections 2062 and 2067 California Endangered Species Act of the CDFG Code and are eligible for State listing. However, these species are fully considered during the preparation of environmental documentation relating to CEQA. This may be particularly appropriate for the type and locality of a List 4 plant, for populations at the periphery of a species range or in areas where the taxon is especially uncommon, or has sustained heavy losses, or from populations exhibiting unusual morphology, or occurs on unusual substrates. In addition, plants deemed significant by an experienced botanist may be considered to be significant under CEQA.

Sensitive Vegetation Communities and Natural Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. However, these communities may or may not necessarily contain Special Status species. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW keeps records of sensitive community occurrences in its Natural Diversity Database.⁸ Sensitive plant communities are identified by CDFW (2003, 2007)⁹ and, more recently, in the *List of Vegetation Alliances.*¹⁰ CNDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.¹¹ Impacts to sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS must be considered and evaluated under CEQA (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G). Specific habitats may also be identified as sensitive in City or County General Plans or ordinances.

⁷ CNPS Ranking System, http://www.cnps.org/cnps/rareplants/ranking.php, accessed on September 28, 2018

⁸ California Department of Fish and Wildlife (CDFW), 2010, Natural Diversity Database, Wildlife and Habitat Data Analysis Branch, Sacramento.

⁹ California Department of Fish and Wildlife (CDFW), 2003, *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database Wildlife and Habitat Data Analysis Branch*, Vegetation Classification and Mapping Program. California Department of Fish and Wildlife (CDFW), 2007. List of California Vegetation Alliances, Biogeographic Data Branch. Vegetation Classification and Mapping Program.

¹⁰ California Department of Fish and Wildlife (CDFW), 2009a, *List of Vegetation Alliances*, Biogeographic Data Branch, Vegetation Classification and Mapping Program.

¹¹ NatureServe, 2010, NatureServe Conservation Status, http://www.natureserve.org/explorer/ranking.

California Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake; generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or streamdependent terrestrial wildlife.¹² Riparian is defined as, "on or pertaining to, the banks of a stream;" therefore, riparian vegetation is defined as, "vegetation, which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself."¹³ Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

Local Regulations and Policies

East Bay Regional Park District Master Plan

The Master Plan categorizes Park District parklands into one of five following classifications:

- ♦ Regional Park
- ♦ Regional Preserve
- Regional Recreation Area
- ♦ Regional Shoreline
- ♦ Regional Trail

The Project area will be incorporated into and managed as an integral part of Coyote Hills Regional Park. A regional park is further described in the Master Plan as having sufficient land area to also support outdoor recreational activities, such as hiking trails. The Master Plan's vision states that regional parks shall be managed as a balance of environmental concerns and outdoor recreational opportunities.

The East Bay Regional Park District Master Plan (Master Plan) defines the long-term vision for lands managed by the Park District. The Master Plan provides a decision-making framework for Park District management, and identifies policies that will achieve district-wide objectives. Park development objectives, land use classifications, and planning and management guidelines are established by the Master Plan. Policies for the preservation and interpretation of cultural resources are woven throughout the Master Plan, including provisions for public participation, interpretation, environmental compliance, open space protection, land acquisition, land use planning, and facility development. Those policies most pertinent to biological resources in the Project Area are summarized below.

¹² California Department of Fish and Wildlife (CDFW), Environmental Services Division (ESD), 1994, A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

¹³ California Department of Fish and Wildlife (CDFW), Environmental Services Division (ESD), 1994, A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

Natural Resource Management (NRM)

- NRM1: The District will maintain, manage, conserve, enhance and restore Park wildland resources to protect essential plant and animal habitat within viable, sustainable, ecosystems.
- NRM1b: To help mitigate the effects of climate change, the District will endeavor to conserve and connect habitat for native species through its acquisition and planning processes.
- NRM4: The District will identify, evaluate, conserve, enhance, and restore rare, threatened, endangered or locally important species of plants and animals and their habitats using scientific research, field experience and other proven methodologies. Populations of listed species will be monitored through periodic observations of their condition, size, habitat, reproduction and distribution. Conservation of rare, threatened and endangered species of plants and animals and their supporting habitats will take precedence over other activities, if the District determines that the other uses and activities would have a significant adverse effect on those natural resources.
- NRM5: The District will maintain and manage vegetation to conserve, enhance and restore natural plant communities, to preserve and protect populations of rate, threatened, endangered, and sensitive plant species and their habitats; and where possible to protect their biodiversity and to achieve a high representation of native plants and animals.
- NRM7: The District will manage agricultural sites and cultivated areas in accordance with appropriate agricultural or landscaping practices and Integrated Pest Management (IPM) methods to control noxious weed infestations, broom and other invasive, non-native shrubs and to eventually replace these invasive plants with desirable native species.
- NRM8: The District will conserve, enhance and restore biological resources to promote naturally functioning ecosystems. Conservation efforts may involve using managed conservation grazing in accordance with District's Wildland Management Policies and Guidelines, prescribed burning, mechanical treatments, Integrated Pest Management and/or habitat protection and restoration. Restoration activities may involve the removal of invasive plants and animals, or the reintroduction of native or naturalized species, adapted to or representative of a given site.
- NRM9: The District will conserve and protect native animal species and enhance their habitats to maintain viable wildlife populations within balanced ecosystems. Non-native and feral animals will be managed to minimize conflicts with native wildlife species. The District will cooperate on a regular basis with other public and private land managers, and recognized wildlife management experts to address wildlife management issues on a regional scale.
- NRM12: The District will manage riparian and other wetland environments and their buffer zones to preserve and enhance the natural and beneficial values of these important resources and to prevent the destruction, loss, or degradation of habitat. The District will participate in the preservation, restoration and management of riparian and wetland areas of regional significance, and will not initiate any action that could result in a net decrease in Park wetlands.
- NRM12b: The District will engage in watershed management planning and practices that will address the shifts in habitat ranges caused by climate change through the preservation and enhancement of streams and wetland areas.

City of Fremont

Lands within the Expansion area are within the City of Fremont and some construction activities are potentially subject to the City of Fremont General Plan or Municipal Code, including zoning, building, grading, and stormwater management. City of Fremont ordinances also provide protection of certain native trees, stream courses, and Special Status species. As a Special District, the Park District has statutory authority over certain areas such as habitat protection and enhancement, landscape management, and construction and operation of recreational facilities. Policies relevant to Biological Resources and their consistency with the Proposed Project are also discussed *Section 3.9* - *Required Permits and Approvals*.

Existing Conditions

Historical Ecology

The Historical Ecology of the Project area consists of information obtained on plant communities and habitats that existed within the Project area prior to settlement and subsequent modifications to the landscape from farming, land reclamation activities, salt production, road construction, and flood control channel and irrigation canal and drainage construction. Historic ecological information can help inform the development of a habitat restoration and enhancement Project, while also contextualizing the substantial changes to soil conditions, surface water and shallow zone groundwater hydrology that have occurred over the last 150 or more years.

Information on the historical ecology of the Project area is available from the 2013 Alameda Creek Watershed Historical Ecology Study¹⁴. **Figure 4.1-1**, derived from this source, shows the plant communities that occurred in the Project area prior to the changes that occurred from the pioneering settlements of the historic Ardenwood area of Fremont. Landscape alteration activities in the Ardenwood area began in the late 1850s when this area began to be intensively farmed, flood irrigated, drained, and reclaimed from the edge of the Bay. Part of the land reclamation involved diverting silt laden runoff from the nearby streams to more low lying saline areas to build up elevations with better soils, as well as installation of a complex agricultural drainage and irrigation system.

The most notable feature on this map is historic Ardenwood Creek and its' riparian area, which was the forerunner of the present day Patterson Slough remnant. Ardenwood Creek consisted of braided distributaries prior to construction of the Alameda Creek and Crandall Creek flood control channels beginning in the late 1960s¹⁵. A large willow sausal or flooded Willow Grove surrounded the creek system and extended to the north and south, covering much of the northern and a part of the central portion of the Park Project Expansion area. Another remnant of this historic channel system occurs on the nearby Ardenwood Historic Farm and includes such riparian species as red willow, arroyo willow, black walnut, and coast live oak.

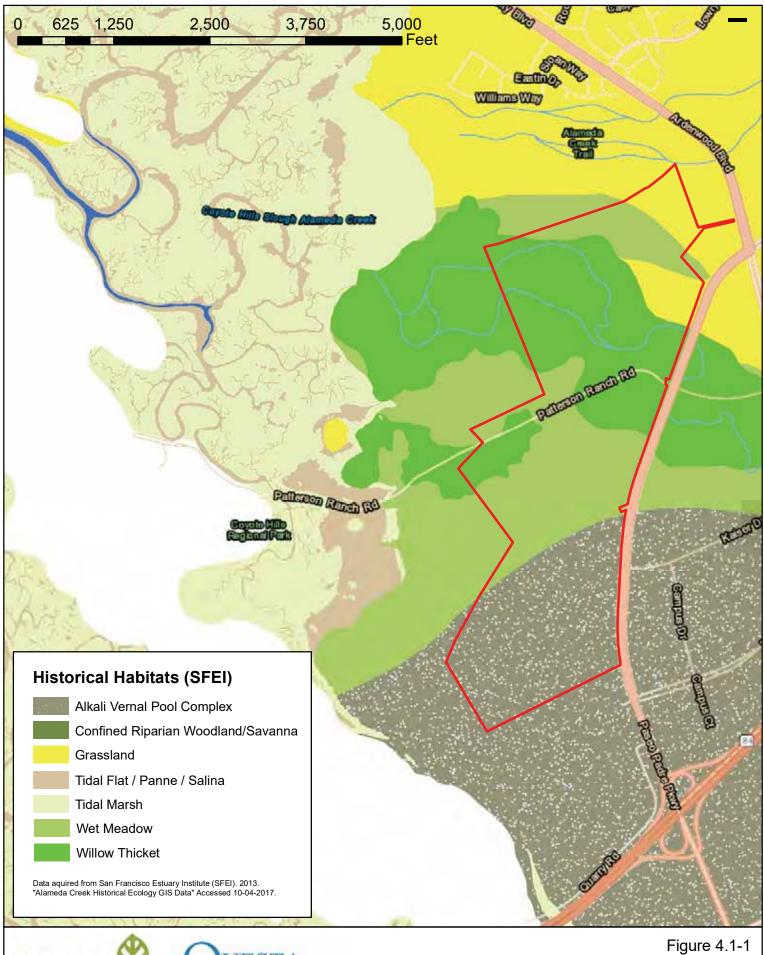
Wet meadow is shown on the Historic Ecology map as occurring in the central portion of the Project area, between present day Patterson Ranch Road and Ardenwood Creek. This was a naturally subirrigated grassland system, fed by a relatively shallow fresh to slightly brackish groundwater system. Much of the wet meadow area is presently farmed, and higher elevation areas contain the best agricultural soils.

Alkali vernal pool complex are shown to the south of Ardenwood Creek. This area still retains a central, salt grass covered drainage ditch, along with scattered shallow drainage depressions that pond rain water seasonally.

The depiction of the alkali vernal pool wetlands in this area is consistent with information collected for the LUPA and restoration planning, which indicates elevations are between about 6.0 and 9.0 feet (NAD88). These elevations represent salt marsh ecotone or the transition zone between marsh and upland grasslands and wet meadow. Soil sampling and laboratory analysis also indicate this area is

¹⁴ San Francisco Estuary Institute (SFEI). 2013. Alameda Creek Watershed Historical Ecology Study.

¹⁵ Oakland Museum of California. 2010. Creek and Watershed Map of Western Alameda County, A Digital Database.



QUESTA, ENGINEERING CORP. Coyote

East Bay

Regional Park District

Figure 4.1-1 HISTORICAL ECOLOGY MAP Coyote Hills Restoration and Public Access Plan

moderately to strongly saline- alkaline with a strongly saline alkali shallow groundwater table 2 to 4 feet below ground surface, during some portions of the year.

Wet meadow and willow thickets are also depicted as historically occurring along Patterson Ranch west of the Park Expansion area with wet meadow being displaced by tidal marsh and saline tidal flat/ panne as the land surface drops in elevation around the toe of the Coyote Hills upland grasslands.

Today much of the lowlands to the west are occupied by cattail dominated marshes which occur in ponded areas, and along the relocated and reconstructed Line P / Ardenwood Creek Flood Control Channel. Scattered remnant patches of willow (willow thickets) also remain in this area.

Existing Use and Management Activities

The Project area contains a variety of native and non-native plant communities that provide a diversity of wildlife habitat. The plant communities and land cover types include: urban or altered lands, fallow and cultivated farm fields, disturbed and weedy grassland areas, degraded seasonal wetlands dominated by non-native weedy species, and mixed riparian forest and oak woodland along Patterson Slough.

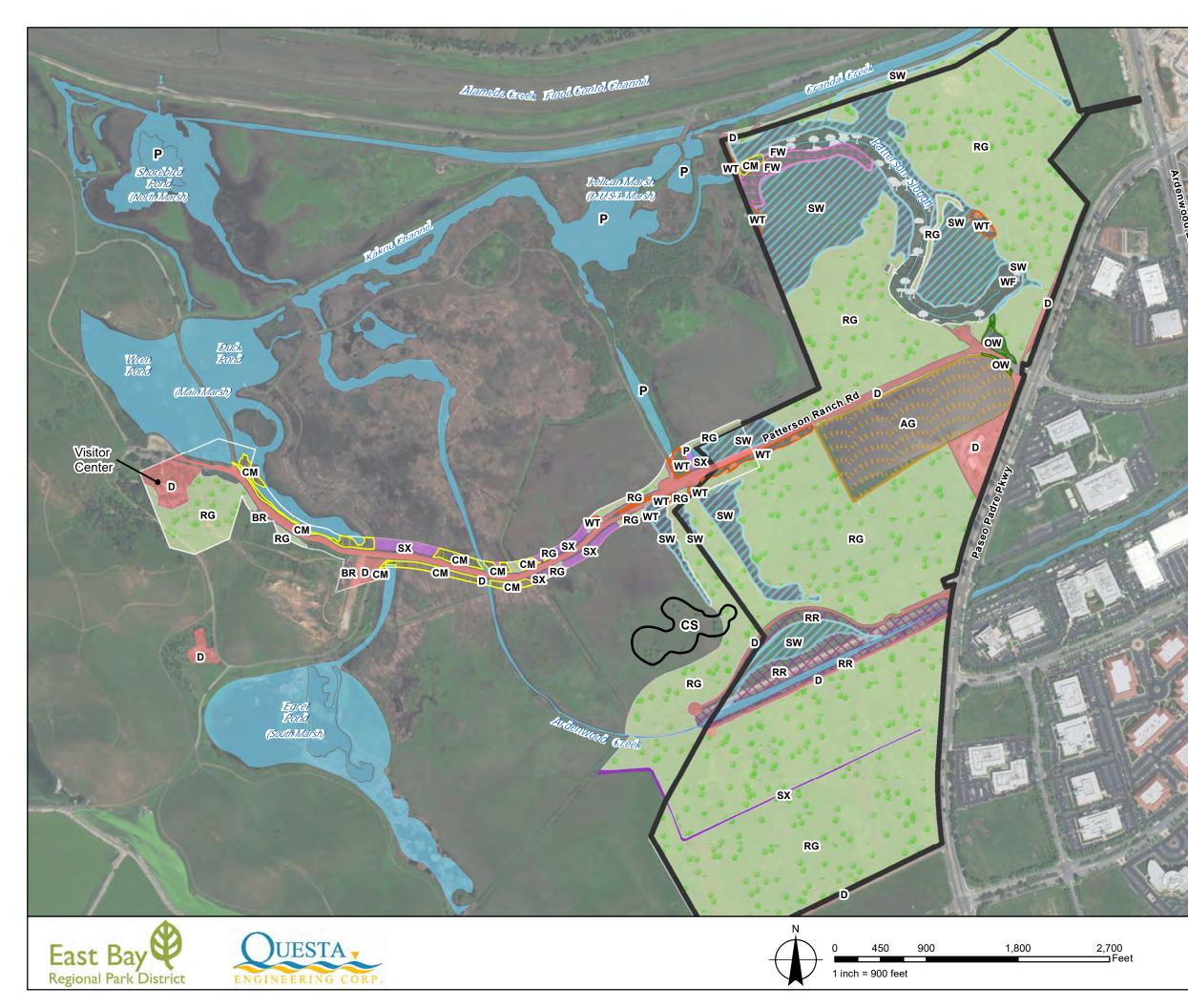
Historic plant communities have been substantially altered over time by human activities, especially by historic farming, which included a complex irrigation and drainage system that has since degraded, and by flood control facilities construction along Crandall Creek, Alameda Creek, and Ardenwood Creek. Internal farm and maintenance access roads and adjacent residential and commercial development have also contributed to changes in site hydrology and plant community composition.

Current and on-going management of the Project area includes mowing and sheep and goat grazing for weed and fire fuels control, and access to Patterson Slough and adjacent ponded wetland areas for mosquito and vector control purposes. Historic and the current disking of crop residue, seeding and planting operations and field mowing have taken place to the edge of the field boundaries along Patterson Ranch Road, Paseo Padre Parkway and Ardenwood Boulevard, Line P/Ardenwood Creek, and the Burrowing Owl levee on the south end of the Project area. Mowing also occurs up to the edge of the Slough. Grazing also occurs up to the field edges and the edge of Patterson Slough, and mowing equipment and grazing support vehicles and equipment, including a Sheppard's trailer have traditionally staged at a disturbed upland area associated with the former and now demolished farm labor housing barracks located near the middle of Patterson Slough, on its immediate south side.

Visitor use of the existing trail systems in the Project area and throughout the Park bring human presence into close proximity to sensitive wildlife habitats, including the Patterson Slough riparian corridor. This includes the existing Crandall Creek Trail located to the north of Patterson Slough and paralleling Alameda Creek, the Tuibun Trail, which parallels Patterson Ranch Road on its north side and runs from Paseo Padre Parkway to the Visitor Center, and the Willow Trail, that provides a connection between Crandall Creek Trail and the Tuibun Trail via a foot path that crosses Patterson Slough near its top or north end.

Biological Communities

There are 11 existing biological communities or plant communities and habitat types that the Coyote Hills Project area (Figure 4.1-2) in addition to agricultural fields and urban and developed areas such as the Farm Corporation Yard. The site is dominated by non-sensitive biological communities including non-native grassland and developed areas. Both wetland and riparian sensitive biological communities are found on the project site. These are broadly categorized as wetlands/creeks or riparian, uplands, grasslands or areas that are weedy (ruderal). These communities consist of habitats with groupings of plant species and associated wildlife that share a niche within the same or similar



BIOLOGICAL COMMUNITIES

SW	Freshwater Seasonal Wetland
SX	Saline Seasonal Wetland
FW	Freshwater Emergant Wetland
СМ	Cattail Marsh
RR	Restored Creek Zone
WT	Willow Thickets
WF	Mixed Riparian Forest
RG	Ruderal Grassland
AG	Agricultural Crop Land
ow	Oak Woodland
D	Disturbed or Developed Land
CS	Cottonwood Stands
Р	Ponded / Waters
BR	Brush

Figure 4.1-2

BIOLOGICAL COMMUNITIES

Coyote Hills Restoration and Public Access Plan

biological and environmental conditions. These communities/habitats, along with their historical context, are discussed below.

Non-Sensitive Biological Communities

Ruderal Grassland (Rg). The ruderal or weedy non-native annual grassland community is one of the larger plant communities present within the Coyote Hills Project area, including in the area immediately north and south of Patterson Ranch Road, surrounding Patterson Slough, and south of Ardenwood Creek and on the hillsides above the Visitor Center

This biological community is characterized by a mixture of some native and mostly non-native species that include grasses, forbs, and shrubs. These species include slender wild oat (*Avena fatua*), Italian rye (*Festuca perennis* [Lolium multiflorum]), ripgut brome (*Bromus diandrus*), wild radish (*Raphanus sativa*), bristly ox-tongue (*Helminthotheca* [Picris] echioides), mustard (*Brassica nigra, B. rapa*), cheeseweed (*Malvia parviflora*), and wild oat (*Avena barbata*), and Italian thistle (*Carduus pycnocephalus*).

Despite its weedy appearance, this mixed plant community supports a variety of endemic mammal populations including the California ground squirrel (Otospermophilus beecheyi), California meadow vole (Microtus californicus) and the Botta pocket gopher (Thomomys bottae). These small mammal populations provide a major food resource for local predators including the Pacific gopher snake (Pituophis catenifer catenifer), White-tailed kite (Elanus leucurus), and Northern harrier (Circus cyaneus). The burrows of ground squirrels and pocket gophers within these non-native grassland communities also provides essential habitat for the burrowing owl (Athene cunicularia) (a California and Federal Species of Concern) whom use abandoned burrows as roosting sites.

Brush (BR). An area of Brush or Brushland, a remnant of the historic coastal scrub community occurs on the upland hills above the Visitor Center. This plant community includes areas of Coyote brush and poison oak, and some scattered California sagebrush, along with annual native and non-native grasslands and forbs.

A variety of wildlife use this habitat, including deer, California thrasher, rock wren, California quail, and Western fence lizard, and California ground squirrel in more open grassy areas. The loggerhead shrike, a California and federal species of Concern nests in the hills.

Agricultural Cropland (Ag). This map unit consists of disturbed or cropped agricultural fields that were also historically (and currently) grazed by cattle and sheep. They are typically disked between crop cycles and also have been used for grains, potatoes, root crops, tomatoes and corn since approximately 1850.

The plant community that resulted from this land use when not in crop production is considered non-native grasses and weedy, ruderal vegetation including black mustard (*Brassica nigra*), poison hemlock (*Conium maculatum*), field bindweed (*Convolvulus arvensis*) and perennial pepperweed (*Lepidium latifolium*).

Although crop land areas are not reflective of the historic ecology of Patterson Ranch, it still provides foraging and habitat for a myriad of small to medium sized mammals such as ground squirrels (*Spermophilus beecheyi*), black-tailed jackrabbits (*Lepus californicus*), deer mice (*Peromyscus maniculatus*), the California Vole (*Microtus californicus*) and Botta's pocket gopher (*Thomonys bottae*) that use these areas, especially during the part of the year that the fields are fallow. As noted above, this constitutes good foraging habitat for a number of important avifauna and large raptor species that use this area.

Developed or Urban Area (D). Developed portions of the Project area include roads and trails that serve the existing the Coyote Hills Regional Park, including Patterson Ranch Road and Tuibun Trail, utility access roads, parking lots, levees, existing buildings and other Park facilities. The primary developed area consists of the Farm Corporation Yard located adjacent to Paseo Padre and south of

Patterson Ranch Road and associated with the leased farm lands. These developed features also include an existing adjacent parking area and several farm buildings. Other developed areas include a utility service area (Union Sanitation District pump station) south of Ardenwood Creek at Paseo Padre Parkway.

Unless fully paved, these developed areas are primarily host to scattered non-native grassland, and ruderal herbaceous populations of wild radish (*Raphanus sativus*), mustard (*Brassica nigra, B. rapa*), cheeseweed (*Malvia parviflora*), wild oat (*Avena barbata*), and ripgut brome (*Bromus diandrus*), slender wild oat (*Avena fatua*), Italian rye (*Festuca perennis* [Lolium multiflorum]), ripgut brome (*Bromus diandrus*), bristly ox-tongue (*Helminthotheca* [Picris] echioides), and Italian thistle (*Carduus pycnocephalus*).

Sensitive Biological Communities

The preliminary waters assessment was based primarily on the presence of unvegetated, ponded areas, or flowing water, or evidence indicating their presence such as a high water mark or a topographically defined drainage course. Areas of wetlands are also shown on the Biological Communities Map (**Figure 4.1-2**). Any potential wetland areas were identified as areas exhibiting dominant hydrophytic vegetation, hydric soil indicators, and wetland hydrology indicators. Hydrophytic vegetation was indicated by dominance¹⁶ of plant species with a wetland indicator status¹⁷, ¹⁷ of OBL, FACW, or FAC as given on the U.S. Fish and Wildlife Service List of Plant Species that Occur in Wetlands.¹⁸ Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, algal mats and oxidized root channels, or indirect indicators (secondary indicators), such as a high water table in the dry season. Some indicators of wetland soils include soils with a sulfidic odor, and soils that contain redoximorphic features as defined in *Field Indicators of Hydric Soils in the United States*.¹⁹

The Project area is somewhat unique in that depressional areas that pond water in the winter have mostly weedy and facultative plants, but most often lack soil indicators of wetlands in their upper profile, other than having very dark soil colors, indicative of their association with a productive biological system.

Freshwater Seasonal Wetland (Sw). The freshwater seasonal wetland plant community occurs scattered throughout the Coyote Hills Project area, including the west end of the farmed area south of Patterson Ranch Road, near Patterson Slough, associated with remnant agricultural drainage ditches, within the southern portion of the Project Area, and along Crandall Creek (K-line channel). These most often occur associated with topographic depressions that pond water, or in low lying

¹⁶ The presence of hydrophytic vegetation is determined based on indicator tests described in the Arid West Supplement. The primary methodology to determine hydrophytic vegetation dominance in the Arid West Supplement is to apply the "50/20 rule" (Indicator 1; Dominance Test) described in the manual. To apply the "50/20 rule," dominant species are chosen independently from each stratum of the community. Dominant species are determined for each vegetation stratum from a sampling plot of an appropriate size surrounding the sample point. Dominants are the most abundant species that individually or collectively account for more than 50 percent of the total vegetative cover in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total vegetative cover. If greater than 50 percent of the dominant species has an OBL, FACW, or FAC status, the sample point meets the hydrophytic vegetation criterion.

 $^{^{17}}$ OBL = Obligate, always found in wetlands (> 99 percent frequency of occurrence); FACW = Facultative wetland, usually found in wetlands (67-99 percent frequency of occurrence); FAC = Facultative, equal occurrence in wetland or non-wetlands (34-66 percent frequency of occurrence).

¹⁸ Reed, Jr., Porter B. 1988. National List of Plant Species That Occur in Wetlands: National Summary. U.S. Fish & Wildlife Service. Biol. Rep. 88 (24). 244 pp.

¹⁹ U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, 2010b, *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils*, Version 6.0, in cooperation with the National Technical Committee for Hydric Soils, U.S. Army Corps of Engineers.

areas that either have a shallow sub-surface clay pan that perches water during the rainy season, or have a high seasonal groundwater table.

Seasonal wetlands are freshwater wetlands that support ponded or saturated soil conditions during winter and spring and are dry through the summer and fall until fall/winter rainfall begins to saturate the soil. Vegetation typically associated with seasonal wetlands in the Patterson Ranch Project study area consists of wetland generalists, such as hyssop loosestrife (*Lithium hyssopifolia*), brass buttons (*Cotula coronopifolia*), birds-foot trefoil (*Lotus corniculatus*), toad rush (*Juncus bufonius*), rabbitsfoot grass (*Polypogon monspeliensis*), Mediterranean barley (*Hordeum marinum* ssp. gussoneaum), and Italian ryegrass (*Festuca perennis*).

The presence of invasive plant species within this plant community is primarily the result of proximity to adjacent disturbed agricultural/ruderal plant communities. Some of the seasonal wetlands were also at one time farmed, as drainage conditions were improved by the installation of an agricultural ditch system that has since deteriorated. Larger areas of high quality freshwater wetland plant communities provide potential nesting habitat for a number of birds including the Northern harrier (*Circus cyaneus*), California black rail (*Laterallus jamaicensis coturniculus*), and the short eared owl (*Asio flammeus*). Of these, short-eared owls and California black rails have been observed to occur to the west in Coyote Hills Regional Park, but not in the Park Expansion area.

Saline Seasonal Wetland (Sx). Saline seasonal wetlands are present in large low lying areas to the north and south of Patterson Ranch Road, beginning generally west of the kiosk and extending to the Ardenwood Creek crossing of Patterson Ranch Road. This seasonal wetland type also occurs along a drainage ditch bisecting the historic vernal pool area south of Ardenwood Creek.

Pickleweed (*Salicornia virginica*) dominates or co-dominates the majority of this area, along with other annual grasses and other salt tolerant native plants. These seasonal wetlands typically extend from an elevation of about 4.0 to 6.5 feet (NAD) where they transition to freshwater seasonal wetlands in depressional areas and ruderal upland grasslands at slightly higher elevations. During winter months incident rainfall and runoff from adjacent areas is temporarily impounded as it slowly infiltrates or drains to adjacent ditches and ponds. Saline groundwater in these areas is within 0.5 and 2.0 feet of the ground surface,

Pickleweed becomes less dominant in the saline seasonal wetlands along and south of Patterson Pass Road, where fat hen (*Atriplex petalua*), brass buttons, (*Cotula cornonopitfolia*), vernal pool mint (*Pogogyne zizpforoides*) Dowingia (*Dowingia concolor*) salt grass (*Disthiculus spicata*) hair grass (*Deschompsia danthonoides*) rabbit foot grass (*Polypogon nonspeliensis*) and dock (*Rumex* sp.) also occur, along with such weeds as alkali Russian thistle, bristly ox tongue (*Picris echiodes*) and Mediterranean barley.

Alkali bulrush (*Bolboschoenus maritumus*) and Baltic rush (*Juncus baltica*) occur in small wetter depressional areas and areas of cattail marsh also contain Tule (*Scirpus acutus*) south of Patterson Ranch Road and west of Ardenwood Creek.

Saltgrass (*Distichlis spicata*) is the predominant plant in the Saline seasonal wetlands mapped in the former agricultural drainage ditch in the area south of Ardenwood Creek, although Rabbitsfoot grass (*Polypogon monspeliensis*), Mediterranean barley (*Hordeum marinum* ssp. gussoneaum), and Italian ryegrass (*Festuca perennis*) were also observed to be present.

Areas dominated by saltgrass occur where saline-alkali sub-soils became the new surface following excavation of the drainage ditch, and where brackish groundwater was brought close to the surface. This represents the likely post grading plant cover for restoration areas that involve shallow excavation in areas with strongly saline alkali sub-soils.

The saline seasonal wetlands are an important resting and foraging area for migratory shorebirds during the fall and winter. These include Black-necked stilt, Common Snipe, Dunlin, Greater Yellow

Legs and Long-Billed Dowitcher. Other notable birds using this habitat include the Short-eared owl, Saltmarsh Common Yellowthroat, Northern Harrier, and Savannah Sparrow.

California Black Rail, (*Laterallus jamaicensis coturniculus*) a California Threatened species (CT) and a Federal Bird of Conservation Concern (BCC), and Salt Marsh Harvest Mouse, (*Reithrondontomys raviventris*) a California and federal Endangered species (CT, FT) utilize this habitat and nearby seasonal wetlands and grasslands. Black Rail is known to occur to the north of Patterson Ranch Road, near the Alameda Creek Flood Control Channel, while salt marsh harvest mouse has been confirmed to be present west of the Park Expansion area, north of Patterson ranch Road. Special Status species are discussed further in the next section of Biology.

Freshwater Emergent Wetland (Fw). This plant community occurs in areas of ponding and seasonally high groundwater, where upwelling fresh to slightly brackish groundwater intersects with the ground surface on the west side of Patterson Slough, making the soils near perennially saturated. In the Project study area plant species associated with perennial freshwater marsh include willows (*Salix* sp.) Mediterranean barley, Italian ryegrass, rabbitsfoot grass nut sedge (*Cyperus eragrostis*), Baltic rush (*Juncus balticus*), toad rush, narrow leaved cattail (*Typha angustifolia*), alkali bulrush (*Bolboschoenus robustus*), hardstem bulrush or tule (*Schoenoplectus acutus* var. occidentalis), Chairmaker's bulrush (*Schoenoplectus americanus*), stinging nettle (*Urtica dioica* ssp. holosericea) and willowherb (*Epilobium ciliatum*).

Review of the existing biological studies that have been completed for this area also noted that previous fieldwork identified the presence of these perennial emergent marsh species, but this plant community has not been allowed to fully develop as it has either been disked or grazed during previous years.

Cattail Marsh (CM). A small Cattail Marsh, which is a form of freshwater emergent marsh, is found in the northern part of the site, at the northern end of Patterson Slough, where the willow over story is more open and where water is ponded at depths of more than 3 feet for extended periods. Extensive areas of cattail marsh are also present just west of the Project area within the existing Coyote Hills Regional Park, and to the immediate north of the Project area along portions of Crandall Creek (K-line channel), as well as within Ardenwood Creek at or near the western end of the Project Area.

Cattail Marsh communities consist of varying densities of cattail varieties including common cattail (*Typha latifolia*), and narrow leaf cattail (*T.angustifolia*) interspersed with occasional patches of bulrush (*Scirpus acutus*) and hardstem tule (*Schoenoplectus acutus*). Birds that frequent these cattail dominated marshes include the pied billed grebe (*Podilymbus podiceps*), ruddy duck (*Oxyura jamaicensis*), and red winged blackbird (*Agelaius phoeniceus*).

Historically, the area now vegetated with cattail marsh to the west was more diverse, and was host to a wide variety of marshland vegetation that supported birds, and mammals including tules (*Schoenoplectus acutus*) and pickleweed (*Salicornia pacifica [S.virginica]*). Farming practices, land alteration, diking, salt production, and increased freshwater runoff are all primary contributors to the establishment and encroachment of dense cattail stands within and around the Project area.

Ponds and Creeks (P). Areas of deeper ponded water and creek channels are shown on the Biological Communities Map in blue, using the symbol P. These areas are generally dominated by two types of cattail. Common cattail (*Typha latifolia*) typically occurs from near water's edge out to a depth of five or six feet. Narrow leaf cattail (*Thypa angustifolia*) predominates on the wet shoreline edge.

The density of the cattail stands in many places may impede use of this habitat by aquatic birds, but non-aquatic birds such as long-billed marsh wren (*Cistothorus palustris*), common salt marsh yellowthroat (*Geothlypis trichas sinuosa*), and red-winged black-bird (*Agelaius phoeniceus*) benefits from

these dense stands. The more open ponded areas provide an important winter refuge for migratory waterfowl, including northern shoveler (*Anas clypeata*), northern pintail (*Anas acuta*), and green-winged teal (*Anas carolinensis*). Diving ducks, terns, and pelicans also use the open water areas. Common breeding birds in the cattail rimmed ponds and marsh areas include American bittern, common moorhen (*Gallinula chloropus*), marsh wren (*Cistothorus palustris*), pied-billed grebe (*Podilymbus podiceps*), and ruddy duck (*Oxyura jamaicensis*. A large flock of tri-colored blackbird (*Agelaius tricolor*), a California Species of Special Concern, uses the emergent marsh and ponds from around mid-November through mid-January.

Restored Creek and Seasonal Wetland Restoration Area (RR). During the fall of 2016, the Line-P section of the Coyote Hills Project area was restored by Alameda County Flood Control and Water Conservation District as part of the Ardenwood Creek Restoration Project. The Project was completed in order to improve flood flow capacity and efficiency, discourage cattails from reestablishing in the channel, and create an integrated ecosystem of riparian and seasonal wetland habitats. There are approximately 20 acres of restored creek and seasonal wetland, including open water, seasonal wetlands, and mixed riparian forest along Ardenwood Creek in the Coyote Hills Project area.

The creek corridor was planted with native trees as a part of the creek restoration work including coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepsis*), and box elder (*Acer negundo*) in order to create an area of mixed riparian forest habitat. This project is in the establishment phase of implementation.

Willow Thicket (Wt). Willow thicket occurs at the east end of Patterson Slough as well as adjacent to Patterson Ranch Road in the northern portion of the site. Willow thickets are also present west of the Coyote Hills Project area and along the flat lands of Crandall Creek (K-line channel).

Willow thickets are dominated by Arroyo willow (*Salix lasiolepis*), and Red willow (*Salix laevigata*) although some widely scattered cottonwoods, box elders and western sycamore trees may occur. Willow thickets are also distinct from mixed riparian forests by their lack of understory vegetation, and the absence of a perennial surface water feature such as a creek.

Willow thickets can provide nesting and foraging habitat for resident and migratory bird species including the tricolored blackbird (*Agelaius tricolor*), yellow headed blackbird (*Xanthocephalus xanthocephalus*), and the saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*). All of these have all been observed within the Project Area or within willow thickets in the adjacent Coyote Hills Regional Park.

Mixed Riparian Forest (Wf). Patterson Slough is the most important biological feature within the Project area and is characterized by a mixed willow-dominated riparian forest.

Mixed willow riparian forests are typically characterized by occurring along stream courses with near perennial surface or near-surface water. The Patterson Slough mixed riparian forest has an established canopy including arroyo willow (*Salix lasiolepis*), coast live oak (*Quercus agrifolia*), and western sycamore (*Platanus racemosa*). This community also has a dense, established vegetative understory that supports poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), and coyote brush (*Baccharis pilularis*). It represents the remnant of a once extensive willow sausal along historical Crandall that occurred from just south of Patterson Ranch Road, to north of Alameda Creek. This was considered to be the largest willow sausal in the East Bay.

Mixed willow riparian forests are another example of a biological community that has decreased in range over the past 150 years due to human use, development, and colonization of invasive plant species. Historically in the Project area, virtually all of the area north of Patterson Ranch Road was a riparian forest or a willow sausal (a willow marsh or forested lake with standing water). Despite the

reduction of their range, these forests still host numerous species of migratory birds including Nuttall's woodpecker (*Picoides nuttallii*), and white tailed kite (*Elanus leucurus*). These forests also provide habitat for a number of medium sized mammals including the western red bat (*Lasiurus blosevillii*), striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), common raccoon (*Procyon lotor*), grey fox (*Urocyon cinereoargenteus*), and mule deer (*Odocoileus hemionus*).

Oak Woodland (Ow). The oak woodland plant community within the Project area consists of a small area of coast live oak trees located north of Patterson Ranch Road at Paseo Padre Parkway, at the south-east end of Patterson Slough. Previous biological studies of Patterson Slough have considered it to be a part of the riparian corridor, but it was separated as a distinct plant community as drainage and hydrology and topographic conditions here are considerably different from the remainder of the Slough, and to point out its unique character for consideration as potential habitat expansion associated with oak savanna restoration and enhancement planning.

This community is comprised of coast live oak (*Quercus agrifolia*) with a developed understory consisting of a mixture of native California grasses and non-native grasses, and forbs. Some of these are slender wild oat (*Avena fatua*), Italian rye (*Festuca perennis* [Lolium multiflorum]), ripgut brome (*Bromus diandrus*), wild radish (*Raphanus sativa*), bristly ox-tongue (*Helminthotheca* [Picris] echioides), and Italian thistle (*Carduus pycnocephalus*.

Cottonwood Stands (Cs). There is a very open stand of widely scattered mature western cottonwood (*Populus fremontii*) trees that extends west from the culvert at Paseo Padre Parkway west to the end of the restored section of the Ardenwood Creek channel. A "grove" of widely scattered cottonwoods also occurs to west of the end of the Ardenwood Creek in the adjacent Coyote Hills Regional Park. Some cottonwood trees along Ardenwood Creek were inter-planted with Western Sycamore and Coast Live Oak trees as a part of the creek restoration project (see Rr description).

Among the local wildlife that are known to frequent and or inhabit these scattered cottonwood trees are the Cooper's Hawk (*Accipter cooperi*), Nuttall's woodpecker (*Picoides nuttallii*), black-tailed jackrabbit (*Lepus californicus*), deer mouse (*Peromyscus maniculatus*) and western red bat (*Lasiurus blosevillii*).

Special Status Species

Special Status Wildlife Species

Species of Special Concern (State) or Species of Concern (Federal) are special animal /plant species tracked by the California Natural Diversity Database (CNDDB), regardless of their legal or protection status. The CNDDB is maintained by the California Department of Fish and Wildlife (CDFW) and is a database or tool that inventories the status and locations of rare plants and animals in California. It is often used in the preparation of the Biological Resources section of CEQA documents and in project regulatory permitting.

For purposes of describing the Special Status of wildlife species below, the following acronyms are used: Threatened (FT) or Endangered (FE) by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under the Federal Endangered Species Act (FESA); Birds of Conservation Concern (BCC); those that are listed or proposed for listing as Rare (CR), Fully Protected (CFP), Threatened (CT), or Endangered (CE) by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); those recognized as Species of Special Concern (CSC) by the CDFW; those recognized by the Western Bat Working Group (WBWG) as High or Medium priority species; and those recognized by the Federal Bald Eagle and Golden Eagle Protection Act (FBGE. Special Status wildlife species are shown in **Table 4.1-1** and **Figure 4-1.3**.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
BIRDS	1	I		
<i>Melospiza molodia pusillula</i> Alameda Song Sparrow	None	CSC, BCC	Present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides.	Moderate Potential: The Project area provides potential habitat for this species with foraging and nesting habitat present.
Laterallus jamaicensis coturniculus California Black Rail	State Threatened	BCC, CFP	Resident in marshland (saline to freshwater) with established, dense vegetation. Common in upper tidal zone of emergent wetlands or brackish marshes dominated by bulrush (<i>Scirpus</i> <i>spp.</i>), cordgrass (<i>Spartina spp.</i>), and pickleweed (<i>Salicornia spp.</i>), commonly found nesting in dense cover such as pickleweed. Prefers larger, undisturbed marshes close to a major water source.	Moderate Potential: Suitable nesting habitat exists to the west of the Project area in Coyote Hills Regional Park and CBR observed in adjacent Regional Park. Unlikely to occur within Park Expansion Project area due to lack of suitable habitat.
Rallus longirostris obsoletus California Ridgeway Rail	State Endangered Federal Endangered	CFP	Endemic to large salt and brackish marshes; requires shallow areas, tidal channels, or mudflats for foraging.	Low Potential: Species has been observed west of Project area in Coyote Hills Regional Park. Status of species breeding locations within Alameda county is undetermined, documented individuals may not have bred adjacent area. Project area does not contain suitable habitat.
Accipiter cooperi Cooper's Hawk	None	CWL	Nests and breeds within mixed riparian forests alongside creek banks. Forages in open grasslands, valleys, and foothills.	Moderate Potential: The mixed riparian forests, oak and willow clusters along Patterson Slough provide adequate nesting habitat for this species.

TABLE 4.1-1SPECIAL STATUS WILDLIFE SPECIES

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for
Common Mame	State Status	Status		Occurrence in Project area
<i>Agelaius tricolor</i> Tricolored Blackbird	CDE	BCC, CSC	This species breeds within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes.	High Potential / Observed: Emergent freshwater thickets along Patterson Slough, K-line, and P-line channels provide nesting habitat. Species observed within Project area by H.T. Harvey (2001)
Xanthocephalus xanthocephalus. Yellow headed blackbird	None	CSC	Migratory species that nests within emergent wetlands within dense thickets, deep water, and along the edges of lakes or large ponds. Forages on large aquatic insects during breeding season.	Low Potential: Rarely nests within the San Francisco Bay Area, Project area are not a sufficient breeding habitat.
Athene cunicularia Burrowing Owl	None	BCC, CSC	Resident of open, dry grasslands/scrublands with low growing vegetation. Breeds, forages in open grasslands that contain small mammal burrows.	High Potential / Observed: Observed along the northern perimeter of the Project area during the winter of 2002-2003 (Dexter, Wendy. May 10 th 2007.) Species has also been observed within Coyote Hills Regional Park.
<i>Elanus leucurus</i> White Tailed Kite	None	CFP	Resident of coastal/valley lowlands of California. Nests in isolated stands of large shrubs or trees, surrounded by open grassland. Preys on small mammals, birds, insects, reptiles, and amphibians.	High Potential / Observed: Observed foraging within the Project area during field surveys. Breeding habitat is present on site. Observed in 2000 and 2001 nesting within mixed riparian forests (H.T. Harvey & Associates 2001).
<i>Aquila chrysaetos</i> Golden Eagle	FBGE	CFP, CWL, BCC	Breeds and winters on cliff-walled canyons, and large trees within foothills, chaparral, sage-juniper flats mountain areas and deserts.	High Potential/Observed: Occurs within the Coyote Hills Regional Park and likely forages within the Project area.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Circus cyaneus</i> Northern Harrier	None	CSC	Nests within shrubby vegetation and forages in open grasslands, meadows, and wetlands.	High Potential / Observed: Nesting habitat present along the margins of Patterson Slough and the K-line and P-line channels. Suitable foraging habitat is present within the agricultural fields of the Project area. Species was observed in 2007, foraging, and documented breeding/nesting within Coyote Hills Regional Park.
Geothlypis trichas sinuosa Saltmarsh Common Yellowthroat	None	CSC, BCC	Found in dense, mixed riparian thickets, and forests along waterways.	Moderate Potential: Suitable habitat and nesting grounds are present in the mixed riparian forest along Patterson Slough. Known to occur in Coyote Hills Park to the immediate west of the Project Area.
<i>Riparia tiparia</i> Bank Swallow	State Threatened		Migratory species to lowland and riparian habitats within coastal California. Nests in colonies along vertical cliffs with fine textured sandy soils near streams, lakes, or ocean.	High Potential / Observed: A possible colony was noted in a 1983 CNDDB observation within the Project area; and several nests were observed and protected under the Line P culvert crossing of Paseo padre Blvd in Spring 2016.
Charadrius alexandrines nivosus Western Snowy Plover	Federally Threatened	CSC, BCC	Resident of sandy beaches, salt pond levees and the banks of alkali lakes. Nesting habitat is sandy/gravely soils.	No Potential: Project area does not contain suitable habitat for nesting.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Buteo regalis</i> Ferruginous Hawk	None	BCC	Preys upon lagomorphs (ground squirrels, mice, etc) within open grasslands, sage brush flats, desert scrub, and low foothills, valleys.	Moderate Potential: Suitable foraging habitat is present within the Project area for wintering; species has not been documented to breed within Project area but is rarely observed within the adjacent Coyote Hills Regional Park.
<i>Falco peregrines anatum</i> American Peregrine Falcon	Federally Delisted	CFP, BCC	Resident species that forages within coasts, bays, marshes (primarily on waterbirds) and other wetland areas. Nests in protected cliff, ledges or manmade structures.	High Potential / Observed: No suitable breeding/nesting habitat is present within the Project area. Species may be seen foraging or soaring over Project area.
<i>Lanius ludovicianus</i> Loggerhead Shrike	None	CSC, BCC	Inhabit open woodland areas with short well-spaced vegetation, particularly those with spines or thorns.	High Potential / Observed: Has been observed and is known to occur within the Project area.
<i>Asio flammeus</i> Short-eared Owl	None	CSC	Migratory species that can be found in grasslands and open areas. They perch in low trees or on theythe ground.	High Potential / Observed: Has been observed and is known to occur within the Project area.
<i>Icteria virens</i> Yellow Breasted Chat	None	CSC	Habitat consists of dense growth along waterways	Moderate Potential: The mixed riparian forest along Patterson Slough may provide potential nesting / foraging habitat.
<i>Accipter striatus</i> Sharp-shinned Hawk	None	CWL	Habitat includes mixed or coniferous forests, deciduous woodlands, and thickets. Often nests within groves of coniferous trees in mixed woods, sometimes in dense deciduous trees or pure coniferous forests with brush or clearings nearby. Tends to avoid open country	High Potential: Known to occur in the neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest and/or ruderal grassland.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Falco mexicanus</i> Prairie Falcon	None	CWL	Resident of open hills, plains, prairies, deserts. Typically found in fairly dry, open country, including grassland and desert. In winter can be found in farmland and around lakes and reservoirs, typically scarce around immediate coast.	High Potential: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Falco columbarius</i> Merlin	None	CWL	Habitat includes Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally breeds in semi-open terrain having trees for nest sites and open areas for hunting. May winter in more open areas, such as grasslands, coastal marshes.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Pandion haliatus</i> Osprey	None	CWL	Rivers, lakes, coast. Found near water, either fresh or salt, where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around large lakes, reservoirs, rivers. Migrating Ospreys are sometimes seen far from water, even over the desert.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within freshwater/saline seasonal wetlands or wetland mitigation area to the south of the site along Line P.
<i>Asio otus</i> Long Eared Owl	None	CSC	Woodlands, conifer groves. Favored habitat includes dense trees for nesting and roosting, open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or deciduous trees in prairie country, streamside groves in desert. Generally avoids unbroken forest.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Dendroica petechia brewstri Yellow warbler	None	CSC, BCC	Bushes, swamp edges, streams, gardens. In west, restricted to streamside thickets.	High Potential/Observed: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.
<i>Eremophila alpestris actia</i> California horned lark	None	CWL	Prairies, fields, airports, shores, tundra. Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of situations that are sufficiently open: short-grass prairies, extensive lawns (as on airports or golf courses), plowed fields, stubble fields, beaches, or lake flats.	High Potential: migrant bird that has been observed infrequently within neighboring Coyote Hills Regional Park. Suitable foraging habitat may be present within the ruderal grasslands, or agricultural fields of the Project area.
<i>Empidonax traillii extimus</i> Southwestern Willow Fly Catcher	Federally Endangered State Endangered		Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes (especially in southern part of range).	Moderate Potential: species is a rare migrant but has been observed in neighboring Coyote Hills Regional Park. Project area may provide suitable habitat within the willow thickets / mixed riparian forest along Patterson Slough.
MAMMALS				
Sorex vagrans halicoetes Salt Marsh Wandering Shrew	None	CSC	Resident of high marshland (2-3 MASL) of the south San Francisco Bay that contains scattered driftwood.	No Potential: Suitable habitat is present in the salt marshes surrounding the Project area. Poor habitat suitability within the Project area, species documented less than 2 miles from Project area.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Reithrodontomys</i> <i>raviventris</i> Salt Marsh Harvest Mouse	Federally Endangered State Endangered	CFP	Saline wetlands of the San Francisco Bay and its tributaries; associated with pickleweed	Low Potential: suitable marsh habitat (pickleweed) does not occur within the Project area/Park Expansion area. The species has been documented to occur in the saline seasonal wetlands north of Patterson ranch road, as well as to the west and south of the Project Area.
<i>Antrozous pallidus</i> Pallid Bat	None	CSC, WBWG High	Roosts along rocky outcrops, cliffs, oak trees, and is also known to utilize buildings and the underside of bridges as roosting sites.	Moderate Potential: Suitable roosting habitat is present within the Project area within, Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.
<i>Lasiurus blosevilli</i> Western Red Bat	None	CSC, WBWG High	Solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. Known to be very tolerant of human activity.	Moderate Potential: Suitable habitat within Project area is present along K/P line channels, in mixed riparian forest stands of Patterson Slough, and in farm buildings.
<i>Myotis thysanodes</i> Fringed Myotis	None	WBWG High Priority	Resident of various woodland habitats roosting in crevice or caves. Forages over open habitats and water bodies.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Myotis Volans</i> Long Legged Myotis	None	WBWG High Priority	Inhabitant of various woodland habitats surrounding bodies of water and open habitats. Roosts in crevices or caves.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
<i>Corynorhinus townsendii</i> Townsend's Big- Eared Bat	None	CSC, WBWG High Priority	Migratory bat associated with various habitats throughout California including desert scrub, mixed conifer forest, or pine forest habitat Specifically associated with limestone caves, mines, lava tubes, and buildings.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
FISH				
Oncorhynchus mykiss irideus Steelhead (Central Coast ESU)	Federally Threatened NMFS		Very flexible life cycle patterns ranging from freshwater residents (non- migratory) to anadromous where adults travel upstream to the Russian river to spawn in cool, clear, well- oxygenated streams. Juveniles remain in these streams for at least 1 year before returning downstream through tributaries such as the Soquel Creek, or Pajaro River to the San Francisco and San Pablo Bay basins.	Low Potential: Unlikely to occur within the Project area, however the flood control channels of Alameda Creek Flood Control Channel are documented as being utilized by steelhead. These lands are outside of the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the channel will need to consider impacts to this protected species.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
AMPHIBIANS				
Actinemys marmorata Western (Pacific) Pond Turtle	None	CSC	Resident of perennial ponds lakes, rivers and streams and even irrigation ditches. Requires suitable basking habitat (logs, floating vegetation) mud- banks, and a shelter that is submerged.	Moderate Potential: Pond turtles have been documented at the adjacent Coyote Hills Regional Park and at upstream (4.5 miles) sections of Alameda Creek. The species could potentially disperse into the Project area. Species has not been observed within the Project area; very limited egg laying sites are available.
<i>Rana draytonii</i> California Red- Legged Frog	Federally Threatened	CSC	Most common in lowlands or foothills. Found near ponds in humid forests, woodlands, grasslands, coastal shrub, and streamside with plant cover. Historically, found along the coast and Coast Ranges from Northern California to northern Baja California.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
Ambystoma californiense California Tiger Salamander	Federally Threatened State Threatened	CWL	Resident of grasslands and low foothills with pools or ponds that are necessary for breeding.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
INVERTEBRATES				I
Danaus plexippus Monarch Butterfly	Federal Candidate	Roosts Protected by CDFW	Winter nesting habitat ranges from Mendocino to Baja California, Mexico along the California coast. Monarchs typically nest in wind protected groves (Eucalyptus, Monterey Pine, and Monterey Cypress) in locations with close proximity to nectar and water sources.	Moderate Potential: Documented roosting sites occur within 0.5 miles of the Project area and individuals may be observed during periods of the year foraging within the Project area. Mixed Riparian forest likely does not support a suitable habitat for roosting/overwintering

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Lepidurus packardi</i> Vernal Pool Tadpole Shrimp	Federally Endangered		Reside in a wide variety of seasonal pools throughout the grasslands of the central valley. The water can be clear to murky and between 50-84 degrees Fahrenheit.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys
<i>Branchinecta lynchi</i> Vernal Pool Fairy Shrimp	Federally Threatened		Reside in a wide variety of seasonal pools including vernal pools, alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops within grassland habitat.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys

Key to Sensitive Wildlife Species Status Codes

	Federal		
FE	Federal Endangered		
FT	Federal Threatened		
FD	Federal Delisted		
FC	Federal Candidate		
FBGE	Federal Bald Eagle and Golden Eagle Protection Act		
BCC	USFWS Birds of Conservation Concern		
MMPA	Species protected under the Marine Mammal Protection Act		
NMFS	Species under the Jurisdiction of the National Marine Fisheries Service		
WBWG	Western Bat Working Group (High or Medium) Priority Species		
	State		
CE	California Endangered		
СТ	California Threatened		
CSC	California Species of Special Concern		
CWL	California Watch List Species		
CFP	California Fully Protected		
CDE	California Candidate Endangered Species		
Species Evalu	ations:		

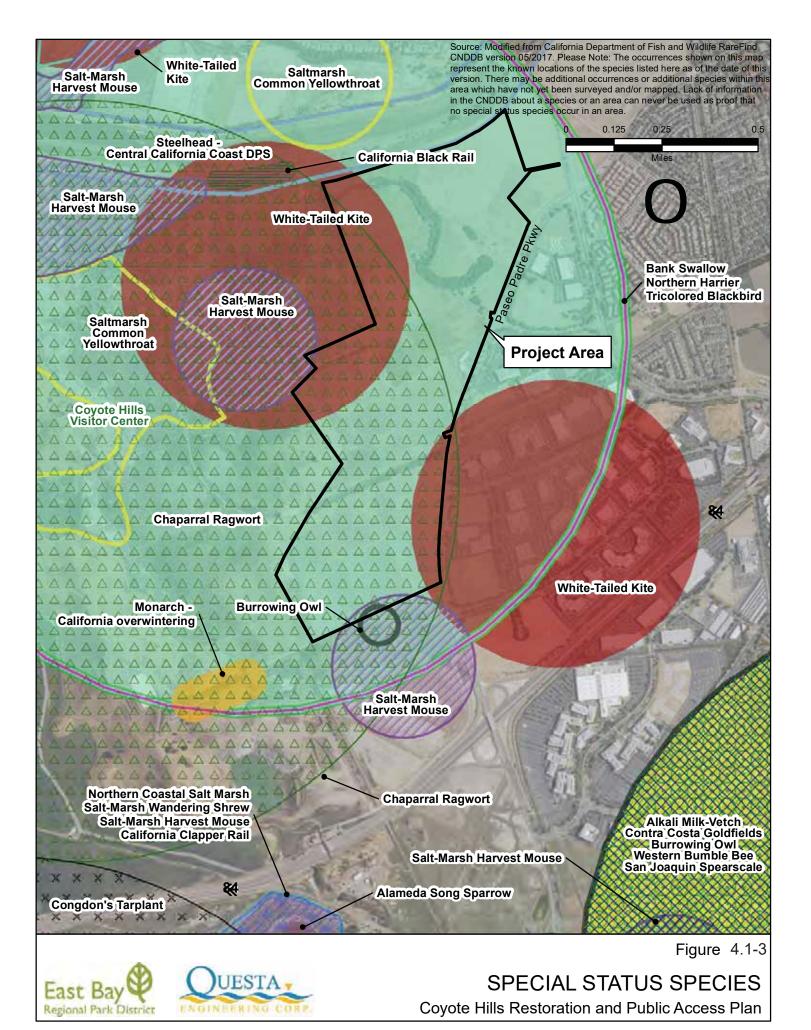
No Potential: Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Low Potential: Few of the habitat components meeting the species requirement are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The Species is not likely to be found on the site.

Moderate Potential: Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

High Potential: All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Observed: Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.



There are a total of 40 Special Status wildlife species that have a moderate or high potential to occur within or in close proximity to the Project area. Twenty of these Special Status wildlife species are either State/Federally threatened/endangered or are of significant prominence within the Project area. The Special Status wildlife species include the following:

- Alameda song sparrow (*Melospiza molodia pusillula*)
- Bank swallow (Riparia riparia)
- Burrowing owl (Athene cunicularia)
- California black rail (Laterallus jamaicensis coturniculus)
- Golden eagle (*Aquila chrysaetos*)
- Loggerhead shrike (Lanius ludovicianus)
- Northern harrier (*Circus cyaneus*)
- Salt marsh common yellowthroat (Geothlypis trichas sinuosa)
- Short-eared owl (*Asio flammeus*)
- Southwestern willow flycatcher (Empidonax traillii extimus)
- Tri-colored blackbird (*Adelaius tricolor*)
- White-tailed kite (*Elanus leucurus*)
- Salt marsh harvest mouse (*Reithrodontomys raviventris*)
- Fringed myotis (*Myotis thysanodes*)
- Long legged myotis (Myotis volans)
- Pallid bat (*Antrozous pallidus*)
- Townsend's big eared bat (Corynorhinus townsendii)
- Western red bat (Lasiurus bloseevilli)
- Steelhead salmon (Oncorhynchus mykiss)
- Monarch butterfly (*Danaus plexippus*)

A number of Special Status Species surveys were conducted during the planning and environmental review work completed for the Patterson Ranch Planned District project as well as monitoring and observation conducted by the Project Biologist during the Phase I Ardenwood Creek Flood Control and Restoration Project. Previous biological surveys included:

- California Red-Legged Frog (CRLF) surveys of Patterson Slough and Line P by Pacific Biology (Sept. 2007) and H.T. Harvey (Aug. 2001). No CRLF found, although potential suitable habitat was identified.
- California Tiger Salamander (CTS) by and H.T. Harvey (Aug. 2003) and Condor Country Consulting (2003). No CTS found.
- Vernal Pool Fairy Shrimp (VPFS) by Condor Country Consulting (Nov. 2003) and Helm Biological Consulting (Feb. 20014). No VPFS or Federally listed large branchiopods found.
- Burrowing owl (BO) by Pacific Biology (July 2007) and H.T. Harvey (Aug. 2001). No BO were found, but were known to have been historically present and observed south of Project area.
- Hawks and other Birds of Prey observed by H.T. Harvey 2001, 2002, 2003) included red tailed hawk, Northern Harrier, and White-tailed kite, which were all observed foraging on site or nearby areas.

Based on the above biological investigations it was determined that the Park Expansion area may provide nesting and foraging habitat for a number of Special Status species listed above. The overall Project Area provides foraging grounds for the peregrine falcon, and numerous other raptors listed by the State as Species of Special Concern. The wetlands and winter ponded areas also serve as nesting, foraging, resting and migratory stop over areas for numerous bird species, especially wading birds, shorebirds, and waterfowl.

Select Special Status wildlife species that were observed, or have moderate to high potential to occur on or near the project site, based on the Biological Resources Assessment and Shuford and Gardali²⁰, are discussed below.

Birds

Alameda Song Sparrow (*Melospiza molodia pusillula*) – CDFW Species of Special Concern, USFWS Bird of Conservation Concern

Alameda Song Sparrow inhabit salt, fresh, and brackish marshes and the moist, brushy, and weedy edges of these habitats and are present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides. This song sparrow will avoid areas where water is stagnant and/or tidal flow is obstructed.²¹ Suitable foraging and nesting habitat is available on the project site.

Bank Swallow (Riparia, riparia) - State Threatened, California Threatened

Bank swallows (*Riparia riparia*) have a very wide distribution throughout the world, but in California are concentrated primarily along the Sacramento and Feather rivers. Their nesting habitat consists of vertical caves, sand banks, and along marshes and river banks. Within the Project area, this species are known to occur to the west within Coyote Hills Regional Park; however observed occurrences are rare and they have not been observed or confirmed to be present within the Project area.

Burrowing Owl (Athene cunicularia) - CDFW Species of Special Concern

Burrowing Owl (BO) are endemic to the grasslands, rangelands, disturbed agricultural areas, and deserts of North America. BO nest and roost within underground burrows such as those excavated by ground squirrels, prairie dogs, and gophers. Nesting season begins in late March or April. Unlike other owls, the BO is frequently active during the day but accomplish the majority of their hunting at night, preying upon small rodents, and insects. BO has been observed within the Project area, and in the neighboring Coyote Hills Regional Park. The ruderal grasslands, and agricultural fields within the Project Area provide suitable nesting and foraging habitat for this species.

Non-Special Status species of swallow are more commonly observed within the Project area, and include: cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), and barn swallow (*Hirunodo rustica*) species. Cliff swallows (a non-listed migratory species) were observed nesting within the Paseo Padre Parkway – Ardenwood Creek/Line P culvert during Pre-construction Biological surveys completed for the ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area project 2016. These cliff swallow nests are protected under the Migratory Bird Treaty Act of 1918 Section 703 and were accordingly protected from disturbance during construction of the culvert.

California Black Rail (*Laterallus jamaicensis coturniculus*) – State Threatened, CDFW Fully Protected, USFWS Bird of Conservation Concern. Low Potential.

California black rail (CBR) are endemic to California's coastal salt and brackish marsh habitats ranging from Bodega Bay to Morro Bay, with some populations known to occur within inland freshwater marshes. Within the San Francisco Bay, CBR is known to occur within habitat that ranges from salt marshes dominated by pickleweed (*Salicornia spp.*), salt grass (*Distichlis spicata*), and cord grass

²⁰ Shuford, W.D., and Thomas Gardali. 2005. *California Bird Species of Special Concern*. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento, CA.

²¹ W.D. Shuford, 1993. *The Marin County Breeding Bird Atlas: A Distributional and Natural History of Coastal California Birds,* California Avifauna Series 1. Bushtit Books, Bolinas, CA.

(Spartina foliosa) to brackish marsh dominated by bulrush (Scirpus spp.), tule (Schoenoplectus acutus), and cattail species (Typha spp.). Nesting for CBR occurs from March through July, with the height of nesting activities occurring in April/May. Within the Project area CBR has been documented to occur within the pickleweed and bulrush dominated marshes to the northwest of the Park Expansion area, just outside of the willow thickets along lower Alameda Creek. There is a low potential for the CBR to occur near the portion of the Project area where Patterson Ranch Road and Tuibun Trail improvements are proposed.

Golden Eagle (Aquila chrysaetos) – (FBGE, CFP, CWL, BCC)

Golden Eagles are widespread throughout the western United States, and prefer secluded cliffs or rocky areas with overhanging ledges. Golden Eagles also utilize large trees such as large oaks (*Quercus sp.*) and western sycamores (*Platanus racemosa*) for nesting and cover. The preferred habitat for the Golden Eagle includes areas that have favorable sites for nesting as well as a dependable food supply, with large open space grassy areas for foraging. Nest site is most often on cliff ledge, also frequently in large tree, rarely on ground. Sites may be used for many years. A pair may have 2 or more alternate nest sites, using them in different years. Nest (built by both sexes) a bulky platform of sticks, lined with weeds, grass, leaves, moss. New material added each year, and nest may become huge. Golden Eagles are known to occur within the adjacent Coyote Hills regional Park although no golden eagle nests have been observed within the LUPA Project area.

Loggerhead Shrike (Lanius ludovicianus) – CDFW Species of Special Concern, USFWS Bird of Conservation Concern

The loggerhead shrike is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered trees, shrubs, posts, fences, utility lines, or other perches. Nests are usually built on a stable branch in a densely-foliaged shrub or small tree and are usually well-concealed. While this species eats mostly Arthropods, they also take amphibians, small to medium-sized reptiles, small mammals and birds; and are also known to scavenge on carrion. Suitable breeding habitat is available for this species in the trees and shrubs on the project site.

Northern Harrier (Circus cyaneus) - CDFG Species of Special Concern

Harrier are residents of wetlands, including marshy meadows; wet, lightly grazed pastures; fallow fields; and freshwater and brackish marshes. They also frequent dry uplands, including upland prairies, mesic grasslands, drained marshlands, croplands, cold desert shrub-steppe, and riparian woodland throughout California.²² Harrier typically nest on the ground in open (treeless) habitats in dense, often tall, vegetation. They choose an extremely varied choice of vegetative cover, even within a single area. Soil types where nests have been observed include drained and non-drained wetlands as well as uplands. The project site contains suitable foraging and marginal nesting habitat for this species, which is known to occur within the Project area.

Salt Marsh Common Yellowthroat (*Geothlypis trichas sinuosa*) – USFWS Bird of Conservation Concern, CDFW Species of Special Concern

This subspecies of the common yellowthroat (*G. trichas*) is found in freshwater marshes, coastal swales, riparian thickets, brackish marshes, and saltwater marshes. Their breeding range extends from Tomales Bay in the north, Carquinez Strait to the east, and Santa Cruz County to the south. This species requires thick, continuous cover such as tall grasses, tule patches, or riparian vegetation down to the water surface for foraging and prefers willows for nesting. Suitable nesting habitat is available in the cordgrass patches and the taller vegetation nearest the marsh habitat on the project site.

²² MacWhirter, R.B. and K.L. Bildstein, 1996, *Northern Harrier (Circus cyaneus)*, in The Birds of North America, No. 210 (A. Poole and F. Gill, eds.), The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.

Short-eared Owl (Asio flammeus) - CDFW Species of Special Concern

Short-eared owl inhabit wide open spaces such as grasslands, prairie, agricultural fields, salt marshes, and estuaries. Short-eared owl eat mainly small mammals, but will also eat birds or insects. Unlike most owls, short-eared owl nest on the ground. Breeding habitat must have sufficient ground cover to conceal nests and nearby food sources of small mammals. Communal winter roosts occur in fields, shrubs, in overgrown rubble in abandoned fields, or in clumps of dense conifers. Nests are usually situated in the shelter of a grass mound or among herbaceous ground cover. Young grow rapidly after hatching, an adaptation to reduce the amount of time they are vulnerable to predation. Short-eared owl routinely lay replacement clutches, because of high predation rates, and may raise two broods in one year. The short-eared owl is highly migratory and nomadic.²³

The seasonal wetlands, nearby annual grasslands and small shrubs at the site provide suitable breeding and foraging habitat for this species, and it has been observed to occur to the west in Coyote Hills Regional Park.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (Federally Endangered, State Endangered)

Southwestern Flycatcher are known to utilize habitat within and adjacent to the Project area ranging from mixed riparian and willow thicket, ruderal grasslands, oak woodland areas, and seasonal wetland habitat for foraging and nesting, with the raptors also using the ruderal grassland areas for foraging.

Tricolored Blackbird (*Agelaius tricolor*) – USFWS Bird of Conservation Concern, CDFW Species of Special Concern

This species breeds to the west in Coyote Hills Regional Park, within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes. Emergent freshwater thickets along Patterson Slough, K-line, and P-line channels also provide nesting habitat.

White-tailed Kite (Elanus lencurus) - CDFG Fully Protected Species

Kite occur in low elevation grassland, agricultural, wetland, oak woodland, and savannah habitats. Riparian zones adjacent to open areas are also used. Vegetative structure and prey availability seem to be more important than specific associations with plant species or vegetative communities. Lightly grazed or ungrazed fields generally support large prey populations and are often preferred to other habitats. Kites primarily feed on small mammals, although, birds, reptiles, amphibians, and insects are also taken. Nest trees range from single isolated trees to trees within large contiguous forests. Preferred nest trees are extremely variable, ranging from small shrubs (less than 10 feet tall), to large trees (greater than 150 feet tall).²⁴ Suitable foraging habitat for this species exists in the marsh habitat and grasslands. Nesting habitat exists in the trees and bushes throughout the site.

Small Mammals

Salt Marsh Harvest Mouse (*Reithrodontomys raviventris*) – Federally Endangered, State Endangered, and CDFW Fully Protected. High Potential

Salt marsh harvest mouse (SMHM) is endemic to the salt and brackish marsh habitat of the greater San Francisco Bay, Suisun Bay, and San Pablo Bay ecotone. The primary habitat associated with SMHM is pickleweed (*Salicornia spp.*) dominated tidal marsh and seasonal wetlands; however more recent studies have shown that SMHM populations are also supported by a more mixed-vegetation habitat, including areas of more open pickleweed and native and non-native grasses. SMHM typically inhabits areas where vegetation is deep, dense, and typically between 11.8 and 23.6 inches in height, although shorter stands and more open areas of pickleweed in seasonal wetlands also provide suitable

²³ Long, K., 1998. Owls: A Wildlife Handbook. Johnson Books.

²⁴ Dunk, J.R., 1995, *White-tailed Kite (Elanus leucurus,*. in The Birds of North America, No. 178 (A. Poole and F. Gill, eds.), The Academy of Natural Sciences, Philadelphia, and The American Ornithologists' Union, Washington, D.C.

habitat for this species. Presence of uplands, as tidal refuge is an essential feature of SMHM habitat, as these higher elevation areas provide an escape from high tide, storm events, and ponding.

SMHM has been documented to occur within the western portion of Project area along Patterson Ranch Road, generally west of the kiosk, and also to the south of the Park Expansion Project area.²⁵ Because of the presence of suitable habitat and historically documented occurrences, there is a high potential for the SMHM to occur near the portion of the Project area where Patterson Ranch Road and Tuibun Trail improvements are proposed.

Bats

Park District staff at Coyote Hills report observing at dusk on many days of the year, a large population of various bat species that utilize the marshes and ponded areas of the Regional Park. These bats feed upon the abundant insect populations within the marsh, and likely roost in the wooded areas of the hills, old farm buildings, under bridges, as well as within the large trees of the riparian corridor along Patterson Slough.²⁶

Bats can be broadly grouped into three categories based on their roosting habits: 1) solitary bats that roost only in tree foliage or bark such as western red-bat (*Lasiurus blossevillii*), or hoary bat (*Lasiurus cinereus*), 2) tree-roosting bats that form groups or colonies of varying size in tree cavities or within loose bark, such as silver-haired bats (*Lasionycteris noctivagans*), and 3) bats that utilize a wide variety of roosts, including old buildings, under bridges and tree cavities. Examples of these include fringed Myotis (*Myotis thysanodes*), and pallid bat (*Antrozous pallidus*).

Solitary-roosting bats can consist either of lone females, as females with young bats, or they can occur as solitary males. Colonial-roosting bats can form large maternity colonies in large tree cavitiess, mines, under bridges, or in buildings. During the day, roosts provide shelter for adult females and their young. At night the young bats would remain in their roost while their mother bats forage before returning to nurse and care for their young. Old abandoned buildings often provide important roosting habitat for various Special Status bat species such as pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*), as well as more common species such as Mexican or Brazilian free-tailed bat (*Tadarida brasiliensis*).

Non-Special Status bats that are common to Alameda County include: hoary bat (*Lasiurus cinereus*), silver-haired bats (*Lasionycteris noctivagans*, and Brazilian free-tailed bat (*Tadarida brasiliensis*). These bats are considered by CDFW as Special Animals (per CNDDB Special Animal List) and along with other non-game mammals are protected by the California Fish and Game Code.

Special Status bats that may have potential to occur within the Project area include: pallid bat (*Antrozous pallidus*) (CSC, and Western Bat Working Group-WBWG High Priority), western red bat (*Lasiurus bloseevilli*) (CSC, WBWG High Priority), fringed myotis (*Myotis thysanodes*) (CSC, WBWG High Priority), *l*ong legged Myotis (*Myotis volans*) (CSC, WBWG High Priority), and Townsend's bigeared bat (*Corynorhinus townsendii*), (CSC WBWG High Priority). These are discussed below.

Fringed Myotis (*Myotis thysanodes*) (CDFW Species of Special Concern, WBWG High Priority)

The Fringed Myotis occurs from sea-level to 900 feet elevation but is most common at middle elevations 350 to 700 feet. Distribution is patchy. It appears to be most common in drier woodlands (oak, pinyon-juniper, ponderosa pine) but is found in a wide variety of habitats including desert scrub, mesic coniferous forest, grassland, and sage-grass steppe. Forages over open habitats and

²⁵ Mills Associates and Questa Engineering Corporation. 1990. Draft Wetlands Enhancement & Restoration Plan for Coyote Hills Regional Park. Unpublished Report prepared for East Bay Regional Park District.

²⁶ Western Bat Working Group. Species Matrix. Available online at http://wbwg.org/matrices/species-matrix/. Accessed February 2019.

water bodies. Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest.

Long Legged Myotis (Myotis volans) (WBWG High Priority)

Long Legged Myotis live in various habitats which include: ponderosa pine woodlands, coniferous forests, pinyon-juniper woodlands, oak woodlands, mountain meadows and riparian zones. They have been captured in desert habitats as well. In mountainous areas, they prefer mid-slope elevations where there is an abundance of food. Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within the oak woodland.

Pallid Bat (Antrozous pallidus) (CDFW Species of Special Concern WBWG High Priority)

Pallid Bats roost along rocky outcrops, cliffs, oak trees, and are also known to utilize buildings and the underside of bridges as roosting sites. Suitable roosting habitat may be present within the Project area within Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.

Townsend's Big Eared Bat (*Corynorhinus townsendii*) (CDFW Species of Special Concern, WBWG High Priority)

Townsend's Big Eared Bat (TBEB) has been reported in a wide variety of habitat types ranging from sea level to 1,000 feet. Habitat associations include: coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Suitable roosting habitat is present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest.

Western Red Bat (Lasiurus bloseevilli) (CDFW Species of Special Concern, WBWG High Priority)

The Western Red Bat (WRB) is a solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. WRB is known to be very tolerant of human activity.

Fish

Steelhead Salmon (Oncorhynchus mykiss irideus) (Federally Threatened)

Steelhead salmon are known to occur in the lower Alameda Creek Flood Control Channel, and have been observed to be present as recently as 2016. Steelhead salmon are unlikely to occur within the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the Alameda Creek channel will need to consider impacts to this protected species.

Insects

Monarch Butterfly (Danaus plexippus) (Federal Candidate) (Roosts CDFW Protected)

The Monarch Butterfly (MB) is a CDFW Special Status species and current candidate for listing as a federally endangered species, has a moderate potential to occur within the Project area. The Monarch Butterfly (MB) has been documented to occur within the eucalyptus groves of the neighboring Ardenwood Historic Farm, and could potentially use the Project area for nectar foraging. It is unlikely that the mixed riparian woodland habitat of the Project area supports a suitable microclimate for MB roosting, and there are no known MB roosting sites within the Project area or adjacent Coyote Hills Regional Park. Roosting sites of MBs can consist of thousands or millions of butterflies on a tree or group of trees; it is these roosting areas that are currently protected by the CDFW.

The MB is listed on the CDFW Special Animals list (CDFW, 2018b) and has a conservation status of "vulnerable to imperiled" from the Xerces Society for Invertebrate Conservation. Over the last several dozen years and based on annual winter counts at known over-wintering sites, researchers

with the Xerces Society have estimated that the MB population has declined by over 50 percent in coastal California²⁷.

Monarch Butterflies engage in a fall migration that takes approximately 85 days and requires multiple generations of butterflies to complete. Starting around October, MBs fly from central and northern parts of the United States and parts of Canada to Mexico and the coast of California, as far north as Mendocino County. The final generation of migrating MBs aggregate in clusters, high in trees at over-wintering sites. Overwintering sites in coastal California commonly include groves of Eucalyptus, Monterey Pine (*Pinus radiata*), and Monterey Cypress (*Hesperocyparis macrocarpa*). These groves have special micro-climates that protect MB from strong winds, rain, and cold weather. In February and March, the surviving MBs breed at the overwintering sites before dispersing.

Special Status Plant Species

Special Status plant species are shown in **Table 4.1-2** and **Figure 4-1.3**, listing those that occur on lists 1 and 2 of the California Native Plant Society (CNPS) - California Rare Plant Rank (CRPR).

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Centromadia partyi ssp. congdonii Congdon's tarplant	None	CNPS Rank 1B.1	Endemic to foothill and valley grasslands. Prefers alkaline soils with white clay present at elevations between 0-750 ft. above sea level.	High Potential/Present: Project area has a suitable habitat and is located within the range of the species. Species was observed during the Fall of 2016 within the southern part of the Project area south of Line P.
<i>Etriplex joaquinana</i> San Joaquin spearscale	None	CNPS Rank 1B.2	Endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain alkaline soils. Elevation range 0-2715ft. and blooms between April and October.	High Potential/Present: Project area contains suitable habitat for this species, and was observed during the Fall of 2016 within the southern part of Project area south of Line P.

TABLE 4.1-2	SPECIAL STATUS PLANT SPECIES
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²⁷ Xerces Society for Invertebrate Conservation (Xerces). State of the Monarch Butterfly Overwintering Sites in California, prepared for the U.S. Fish and Wildlife Service. Available online at: http://www.xerces.org/wp-content/uploads/2016/07/StateOfMonarchOverwinteringSitesInCA_XercesSoc_web.pdf. Accessed December 2018.

Scientific Name	Federal /	Other Status	Habitat Association	Potential for
Common Name	State Status			Occurrence in Project area
<i>Atriplex minuscule</i> Lesser saltscale	None	CNPS Rank 1B.1	Endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain sandy, alkaline soils. Elevation distribution between 45-650 ft. Blooms May - October.	High Potential/ Present: Project area contains suitable habitat for this species, and was observed during the Fall of 2016 within the southern part of Project area south of Line P.
<i>Eryngium</i> aristulatum var. hooveri Hoover's button celery	None	CNPS Rank 1B.1	Resident to vernal pools, alkaline depressions and ditches. Elevation range 10-150 feet. Blooms between July and August.	Moderate Potential: Project area has potentially suitable (alkaline wetland) habitat. Species was observed in Project vicinity
<i>Phalaris arundinacea</i> Canary Grass, Reed	None	CNPS Rank 1B.1	Perennial grass that is native to California. Typically occurs within wetland habitats, but can also occur outside of wetlands. Known to inhabit valley grassland, foothill woodland, chaparral, yellow pine forest, or wetland riparian habitats.	Moderate Potential: Observed in nearby Coyote Hills Regional Park and may be present within the upland chaparral or wetland habitats within the Project area.
Sparganium eurcarpum ssp. eurycarpum Bur-Reed, Broad Fruit	None	A1	Perennial member of the bur reed family that spreads by rhizomes. Typically occurs in areas with ponding or seasonal flooding. Rhizomes can survive periods of drought.	Moderate Potential: Occurs in the neighboring Coyote Hills Regional Park, potential habitat may exist within the seasonal wet lands in the south portion of the Project area.
Sparganium erectum ssp. stoloniferum Bur-Reed, Erect	None	A1	Perennial member of the bur reed family that spreads by rhizomes. Native to herbaceous marsh, and occurs with ponding or seasonal flooding.	Moderate Potential: Occurs in the neighboring Coyote Hills Regional Park, potential habitat may exist within the seasonal wet lands in the south portion of the Project area.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Astragalus tener var. tener Alkali milk-vetch	None	CNPS Rank 1B.2	Annual herb that blooms March through June. Occurs in low ground alkali flat and flooded lands in alkali playa. Documented to occur 2 miles southeast of Project area.	Moderate Potential. Project area may contain suitable habitat within slightly alkaline seasonal wetlands in the southern portion of the Project Area. Not observed during previous rare plant survey of 2016.
<i>Navarretia prostrate</i> Prostrate Navarretia	None	CNPS Rank 1B.1	Annual herb that blooms from April to July. Typically occurs within alkaline, mesica areas in coastal scrub, valley grassland, and vernal pools from 10-2,100 feet in elevation. Occurs in Don Edwards National Wildlife Refuge.	Moderate Potential: Project area may contain suitable habitat within the saline seasonal wetlands or in the southern portion of the Project Area. Not observed during previous rare plant survey of 2016.
<i>Plagiobothrys glaber</i> Hairless popcornflower	None	CNPS Rank 1A	Annual herb that blooms from March to May. Typically occurs in alkaline grassy areas in meadow and coastal salt marsh habitat at elevations between 0-15, 45 ft. Species has been observed within 5 miles of the Project area in Hayward, and Union City.	Low Potential: Project area may contain suitable habitat within the saline/alkaline seasonal wetland drainage ditch in southern portion of the Project area. Not observed during previous rare plant survey of 2016.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Trifolum hydrophilum</i> Saline clover	None	CNPS Rank 1B.2	Annual Herb that blooms from April to June. Typically occurs within mesic, alkaline sites in marshes, swamps, valleys, foothill grasslands, and vernal pool habitats at elevations ranging from 0-1,495 ft. Was observed three miles east of the Project area in Newark in 2013.	Moderate Potential: Project area may contain suitable habitat within the saline/alkaline seasonal wetland drainage ditch in southern portion of the Project area. Not observed during previous rare plant survey of 2016. Species was recorded three miles east of the Project area in Newark in 2013.

Key to Status Codes

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List 1A	CNPS List 1A: Plants presumed extinct in California		
List 1B	CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere		
List 2	CNPS List 2: Plants rare threatened or endangered in California, but more common elsewhere.		
	A – listed as rare, threatened or endangered statewide (includes A1)		
Special Plant Status according to	A1 - Known from 2 or less botanical regions in the 2 counties		
CNDDB*	A1x – Believed to be extirpated in the 2 counties		
	A2 - Known from 3-5 regions or if more = important		
Threat Rank	0.1 - Seriously Threatened in California (Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)		
	0.2 - Fairly threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)		
	0.3 - Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)		
Species Evaluation	///////////////////////////////////////		
	itat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, , plant community, site history, disturbance regime).		
	v of the habitat components meeting the species requirement are present, and/or the majority of habitat he site is unsuitable or of very poor quality. The Species is not likely to be found on the site.		
Moderate Potentia	1: Some of the habitat components meeting the species requirements are present, and/or only some of		
High Potential: All or adjacent to the sit	acent to the site is unsuitable. The species has a moderate probability of being found on the site. of the habitat components meeting the species requirements are present and/or most of the habitat on the is highly suitable. The species has a high probability of being found on the site. was observed on the site or has been recorded (i.e. CNPS, other reports) on the site recently.		
<u>Observed</u> species was observed on the site of has been recorded (i.e. Gives, other reports) on the site recently.			

* As mentioned in Coyote Hills 2005 Initial Study/Mitigated Negative Declaration

Adjacent Coyote Hills Regional Park. According to the 2005 Coyote Hills Regional Park Land Use Plan (LUP) and accompanying CEQA document, and based on information obtained from the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS), and Calflora, six Special Status plant species have been previously reported as being present in the Coyote Hills Regional Park, west of the Park Expansion Project area and have moderate or high potential to occur in the saline seasonal wetlands near Patterson Ranch Road:

- Rayless ragwort (*Senecio aphanactis*), is a CNPS 2B.2 species and is considered to be rare, or endangered in California, but more common elsewhere. This plant is found in alkali marsh and grassland. Rayless ragwort was last reported in Coyote Hills in 1892 (sic) and very likely no longer occurs there.
- Greene's or erect bur-reed (*Sparganium erectum ssp. stoloniferum*), is listed by Dianne Lake's Unusual and Significant Plants of Alameda and Contra Costa Counties as A1. This freshwater marsh and wetland species is currently known from only two areas in Alameda and Contra Costa Counties and was listed as present confirmed in the 2005 Coyote Hills LUP and CEQA document.
- Broad fruit bur-reed (*Sparganium eurcarpum ssp. eurycarpum* is also on Lake's List as an A1 plant, and occurs in the freshwater marsh and wetland areas. This plant was also confirmed as being present in the 2005 LUP, but was not observed during the 2016 Rare Plant Survey by Jane Valerius.

Three of the Special Status plants that are known to occur in saline seasonal wetlands within the adjacent Regional Park are Lake's List A2 species, and are known from three to five botanical regions within Alameda and Contra Costa Counties. They include:

- Saltmarsh spikeweed (Hemizonia pungens ssp. aritime) in the salt marsh
- Parish's wheat-grass (*Elymus stebbinsii*) on the dry, open slopes (and not likely to occur in the Project area)
- Reed canary grass (*Phalaris arundinacea*) in riparian and wetland areas.

There is a potential for these plants to occur in saline seasonal wetlands north of Patterson Ranch Road and west of the Park kiosk, but their presence was not confirmed as part of the LUPA botanical surveys.

Park Expansion Project Area. During previous rare plant surveys conducted within the Park Expansion Project area as part of the proposed Patterson Ranch Development Project EIR, no rare plants were observed. The authors of the EIR thought Special Status plants were unlikely to be present in ruderal and weedy fallow farm fields or agricultural lands. No rare plants were observed during the field work conducted for the preliminary wetlands determination for the Project area north of Ardenwood Creek, but a thorough botanical survey was not completed.

A Rare Plant Survey was conducted by Jane Valerius, Consulting Botanist and Wetlands Scientist, that covered the area south of Ardenwood Creek within the Park Expansion area on June 27, 2016, prior to the construction of the Ardenwood Creek (Line P) Phase I flood control improvement Project by ACFCWCD. This survey resulted in the discovery of three associated species of the pickleweed (*Sarcoconia pacifica*) alliance within the southern portion of the Project area in an area of historic alkali vernal pool habitat. These plants include Congdon's Tarplant (*Centromadia parryi ssp. congdonii*), Lesser Saltscale (LS) (*Atriplex minuscula*), and San Joaquin Spearscale (SS) (*Exriplex joaquinana*). All of these plants are ranked by the CNPS as 1B (plants rare, threatened, or endangered in California and elsewhere) in California. Seed from these plants were collected and are being stored for use in wetlands restoration of this area.

Descriptions of these plants are provided below:

Congdon's Tarplant (Centromadia parryi ssp. Congdonii) (CNPS 1B.1)

This species is endemic to foothill and valley grasslands. It prefers alkaline soils (white clay) present at elevations between 0-750 ft. above sea level. The Project area has a suitable habitat and is located within the range of the species. This species was observed during the fall of 2016 within the southern part of the Project area, south of Ardenwood Creek/Line P in the Southern Wetlands Natural Unit.

Lesser saltscale (Atriplex minuscule) (CNPS 1B.1)

This species is endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain sandy, alkaline soils. Elevation distribution between 45-650 ft. and blooms May - October. The Project area contains suitable habitat for this species, and was observed during the fall of 2016 within the WMA part of Project area south of Line P.

San Joaquin spearscale (Etriplex joaquinana) (CNPS 1B.2)

This species is endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain alkaline soils. It occurs at elevation range 0-2715ft. and blooms between April and October. The Project area contains suitable habitat for this species, and was observed during the fall of 2016 within the WMA part of Project area south of Ardenwood Creek in Line P.

In addition to the above Special Status plants as being confirmed as present in the Southern Wetlands Natural Unit, four other Special Status plants associated with alkali wetlands were determined to have some potential to occur in this area, but were not observed during Jane Valerius' 2016 Rare Plant Survey:

- Hoover's button celery (Eryngium aristulatum var. hooveri)
- Alkali milk-vetch (Astragalus tener var. tener)
- Prostrate navarretia (*Navarretia prostrate*)
- Saline clover (*Trifolium hydrophilum*)

Standards of Significance

The baseline for determining the significance of potential impacts under CEQA, for the purposes of this Draft EIR, is the existing condition of the Project area.

Biological resource impacts associated with the project would be considered significant if the Project would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or Special Status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, seasonal wetland, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e. Conflict with applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or State habitat conservation plan.

Assessment Methodology

Methods

General information about Project area biological resources were obtained through a review of published and un-published literature, through general and focused field surveys, and by consultation with biologists and Park District staff knowledgeable about the biology of the Coyote Hills area.

Information on Special Status plant and wildlife species was compiled through a review of the California Natural Diversity Database 2018 Database (CNDDB 2018a) for the Newark 7.5-minute topographic quadrangle, the California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW, 2018b), State and Federally Listed Endangered and Threatened Animals of California (CDFW, 2018c), California Bird Species of Special Concern (Shuford and Gardali, ed. 2005) the California Native Plant Society's on-line electronic inventory of rare and endangered plants of California, and the USFWS Information on Planning and Conservation (IPaC) list (USFWS, 2018).

Previous general reports on the biological resources of the Project area that were reviewed and as appropriate incorporated into Biological Resources Assessment and this analysis included the following:

• Mills Associates Planning and Environmental Services with Questa Engineering, Inc., for

East Bay Regional Park District. 1990. "Wetlands Enhancement & Restoration Plan for Coyote Hills Regional Park." June 7, 1990.

- East Bay Regional Park District- Initial Study and Proposed Mitigated Negative Declaration for Coyote Hills Regional Park Land Use Plan, February, 2005
- East Bay Regional Park District- Coyote Hills Regional Park Land Use Plan, April, 2005
- East Bay Regional Park District- Initial Study and Proposed Mitigated Negative Declaration for Demonstration Urban Stormwater Treatment Marsh Restoration Project, Coyote Hills Regional Park, Fremont, CA. February, 2005
- H.T. Harvey Associates. Patterson Ranch Biological Opportunities and Constraints Analysis, April, 2004.
- Circle Point, Final Environmental Impact report Volume 1- Modified Recirculated Draft EIR-Patterson Ranch Planned District. City of Fremont. Sept 2010.
- Circle Point. *Addendum to the Patterson Ranch Planned District.EIR.* City of Fremont. Sept 2013.
- WRA, Inc. Biological Resources Assessment Report, Ardenwood Creek Flood Protection and Restoration Project, Fremont, Alameda County, California. October 2013.

In addition to these general biological surveys and reports, a number of Special Status Species Surveys were also completed associated with the proposed Patterson Ranch Planned District EIR, and are referenced in the section on Special Status Species (see p. 90)

Site Survey for Wildlife: Samuel McGinnis, PhD, conducted a general survey of the Project area on several occasions during the spring, summer and fall of 2016, updating his knowledge of the area from his prior research for "Wetlands Enhancement & Restoration Plan for Coyote Hills Regional Park", prepared in 1990. The field surveys focused on the animal species reported in the CNDDB.

Rare Plant Surveys: Jane Valerius conducted special status plant surveys for the Southern Wetlands Natural Unit, south of Ardenwood Creek on September 1, 2016. A list of special status plant species reported in the CNDDB was compiled and reviewed prior to the field surveys. Observations for potential rare plants for the remained of the Project area were completed by Valerius associated with preliminary jurisdictional wetlands fieldwork.

Wetland Delineation: Jane Valerius conducted a wetland delineation to identify potential areas that are subject to the U. S. Army Corps of Engineers (USACE) on April 11, 2017 and May 2, 2017. The USACE wetland definition was s based on a three-parameter definition which requires that there be a dominance of wetland plants, presence of wetland soils, and presence of wetland hydrology.

Historical Ecology. Information on the Historical Ecology and historic creeks and drainage conditions of the Project area were obtained from the San Francisco Estuary Institute's Alameda Creek Historical Ecology Study of Feb. 2013, and from the Oakland Museum of California, 2010, Creek and Watershed Map of Western Alameda County, a Digital Database.

Hydrology and Restoration. Concepts regarding the hydrology of the Patterson Slough area used in developing an understanding of the area for development of habitat restoration and enhancement recommendations and analyzing project actions that might impact hydrology and associated riparian resources were based on information contained in two Balance Hydrologic's reports for the proposed Patterson ranch Development,

- Balance Hydrologics Inc., Berkeley CA. Drainage Report and Analysis of Opportunities and Constraints at Ardenwood 2000, July 2000.
- Balance Hydrologics Inc., Berkeley CA. *Hydromodification Control requirements for the Tract 8035 Patterson Ranch Project*, April 2010.

Climate Change and Sea Level Rise. Potential Climate Change effects on the Project area were developed based in part on information contained in Goals Project 2015: The Baylands and Climate Change: What We Can Do. Baylands Ecosystem Habitat Goals Science Update 2015 prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. California State Coastal Conservancy, Oakland, CA and information contained in the Bay Conservation and Development Commission report Adapting to Rising Tides; Alameda County Shoreline Vulnerability Assessment, by AECOM and Brian Fulfrost & Associates, May 2015.

Impact Assessment

Using the Standards of Significance listed above, the impact analysis evaluates how Proposed Project activities during construction and park operation would affect biological resources. This is determined by using the information from the Existing Conditions section, literature information about the responses of biota to disturbances and pollutants, and preparer expertise and judgment in evaluating existing information regarding species and habitats present and how the components of the Project would interact with the environment.

The assessment of impacts assumes that the Proposed Project would conform to State and federal regulations and would include the acquisition of, and compliance with, appropriate permits and certifications associated with construction (building, grading, demolition), stormwater management, erosion control and disposal of contaminated materials, as required. Specifically, it is assumed that the Project could include the following:

- ♦ A Section 404 of the Clean Water Act; if needed, for work associated with potential placement of trail structures and enhancement of the existing seasonal wetlands, may be covered under a Corps Nationwide Permit 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities.
- The Corps may potentially initiate consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act

because of activities in wetlands or waters that have the potential to be, or are occupied by listed species, or they occur near enough to the Project Area that they may be impacted.

- Permits from the San Francisco Bay Regional Water Quality Control Board, including a 401 Water Quality Certification, if needed, and a NPDES stormwater permit may be required for construction of the public access and recreational elements of the Project in wetlands or waters..
- Preparation and compliance with a Stormwater Management and Erosion Control and Revegetation Plan.
- Compliance with the regulations of Bay Area Air Quality Management District, Alameda County Public Works and Health Department.
- Voluntary compliance and coordination with the City of Fremont regarding Municipal Code requirements and ordinances.

Impact Discussion

Project Analysis

The following describes potentially significant impacts to biological resources that could result from implementation for the Project. The analysis is based on the Project actions contained in the proposed LUPA, Park Development Plan, and Project Description that would result in physical changes to the baseline environmental conditions within the Project Area. These actions are described below for each biological significance criterion.

Implementation of the Project has the potential to adversely impact biological resources primarily within the Project area, including impacts to: natural plant communities, wetlands and riparian habitat, and Special Status wildlife and plant species. If an impact is determined to be potentially significant, CEQA requires feasible measures be developed and implemented to minimize the impact. Mitigation of significant impacts must substantially lessen or entirely eliminate the physical impact that the project action will have on the biological resource. CEQA requires that all feasible mitigation be undertaken, even if it does not fully reduce impacts to a *less than significant* level of impact.

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or Special Status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact BIO-1: The Project could have a substantial adverse effect, either directly or through habitat modifications and disturbance, on species identified as a candidate, sensitive, or Special Status species in local or regional plans policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. This represents a *potentially significant* impact.

For CEQA analysis and purposes of discussion of impacts and mitigations for Special Status species, the following section discusses plants and wildlife that were found to have moderate to high potential to occur, or are known to occur within the Project area. These Special Status species are first discussed in general terms on a Project-wide basis, and then grouped into distinctive or similar kinds of species for a more detailed discussion and analysis of impacts and species-specific mitigation measures. These groupings are as follows:

- 1. Special Status Plant Species
- 2. Other Special Status Bird Species, Migratory Birds and Raptors
- 3. Salt Marsh Harvest Mouse
- 4. California Black Rail

- 5. Burrowing Owl
- 6. Western Pond Turtle
- 7. Bats
- 8. Monarch Butterfly

Impact BIO-1a, Project-wide: General Discussion of Impacts to Special Status Species. Implementation of the LUPA and Park Development Plan, including construction of proposed recreational and visitor-serving facilities, the proposed emergency vehicle and maintenance access travel ways, the multi-use and hiking trail network with associated bridges, and proposed cultural resources and water resource management actions, would result in physical changes to baseline environmental conditions within the Project area that support or provide potential habitat to Special Status species.

These actions include: clearing and vegetation disturbance, excavation, fill placement and grading in non-wetland areas, and near or immediately adjacent to jurisdictional wetlands and riparian areas. Additional proposed actions include: placement of base rock and paving of roads, trails, parking areas, and other recreational facilities construction, such as fencing, signs, picnic tables, and utility improvements. Restoration and enhancement actions also include excavation and fill placement, seeding and planting, irrigation, mowing, weeding, and selective herbicide application to control invasive weeds.

These actions could result in temporary and in some cases permanent impacts to Special Status species or the habitat for these species. This represents a *potentially significant* impact.

Temporary construction impacts to Special Status species would be minimized through implementation of the Park District's Best Management Practices (BMPs) as contained in their Construction Technical Specifications. These BMPs include the following:

- Mandatory biological resources awareness training for all construction personnel about Special Status species that could potentially occur within the Project area.
- Protection of all trees in construction work areas, staging areas and along construction access, including no driving or parking within the drip line of a tree unless approved by the District Inspector, along with installation of protective temporary fencing the around drip line of trees.
- Requiring equipment and vehicles to be stored a minimum of 100 feet from the top of all creek banks and requiring vehicle maintenance and fueling of equipment and vehicles a minimum of 200 feet from the top of the creek bank.
- Use of silt fences and fiber rolls to prevent loss of habitat due to erosion or siltation.
- Require that erosion control measures that include installation of fiber rolls and erosion control blankets do not contain netting that could trap small animals and that are weed and seed free.
- Covering trenches with plywood or similar materials, and/ or providing a ramp to allow trapped animals to escape the excavation when not covered.

The following additional mitigation measures would be implemented Project-wide to further reduce impacts to Special Status species.

Mitigation Measure BIO-1a, Project-wide: General Conservation Measures to Protect Habitat for All Special Status Wildlife Species.

The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status wildlife species. Prior to conducting work and during work in sensitive biological communities and Special Status species habitats, including work within 100 feet of Patterson Slough, and within or near jurisdictional wetlands, the following measures will be implemented.

- A qualified, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) approved Biological Monitor (Qualified Biologist) shall be present to observe work and shall have the authority to halt work as necessary if permit conditions are being violated.
- Pre-construction biological surveys appropriate to Special Status wildlife species will be conducted by the Qualified Biologist prior to initiation of construction.
- Before any construction activities begin on the Project, the Qualified Biologist shall conduct a training session for construction workers, and Park personnel involved in construction of the Project. The training shall include a description of each Special Status species that might occur and their respective habitats, including wetlands, the general measures that are being implemented to protect each of the species as they relate to the Project, and the physical boundaries within which the Project shall be accomplished. The training should also provide instruction in the appropriate protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers.
- Before starting ground disturbing activities within construction areas, the Park District and its Construction Contractors shall clearly delineate the boundaries of the construction area with fencing, stakes, or flags. Contractors shall be required to restrict construction-related activities to within the fenced, staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of construction-related activities in that area. Fencing stakes and flags shall be removed upon completion of construction work. Sensitive habitat areas, including Special Status wildlife species habitat and known populations, and jurisdictional wetlands, shall be clearly indicated on the Project construction plans.
- To prevent Special Status wildlife species from moving through the construction area, the Park District or its Construction Contractors shall install temporary wildlife exclusion fencing. Final fence design, including appropriate animal escape structures within the fencing and fence location, shall comply with permit conditions, as appropriate for each species being protected. Any construction-related disturbance outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval of the Qualified Biologist. New trails, bridges, or other structures shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Qualified Biologist.

- Where wildlife exclusion fencing is not installed and ground disturbing activity is occurring, the Qualified Biologist will approve the proposed disturbance in advance and clear the area prior to the start of ground disturbing activity.
- A USFWS-approved and/or CDFW-approved Biological Monitor should be on-site during installation of the fencing to any Special Status wildlife outside the construction area. The fencing shall be inspected by the qualified Biological Monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. After construction has been completed, the exclusion fencing shall be removed within 72 hours.
- Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Qualified Biologist or a qualified biologist working under their direction shall survey within the exclusion area to ensure that no Special Status species are present. The Qualified Biologist or a qualified biologist working under their direction shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of Special Status species.
- Excavated soils shall be stockpiled in disturbed areas lacking native vegetation, and/or as shown on the Construction Plans, or approved by the Qualified Biologist.
- All detected erosion caused by Project-related impacts (i.e., grading or clearing for new trails) and other improvements shall be remedied immediately upon discovery.
- The introduction of exotic plant species shall be avoided first through prevention, followed by physical or chemical methods. Construction equipment shall arrive at the Project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Weed-free rice straw or other certified weed free straw shall be used for erosion control. Earth-moving equipment, gravel, fill, or other materials will be weed-free. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter or other debris or seed-bearing material before entering the Park or from an area with known infestations of invasive plants and noxious weeds. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by the Qualified Biologist.
- Use of herbicides as vegetation control measures shall be used in compliance with the Park District's IPM policies and Best Management Practices (BMPs). All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation, as well as additional Project-related restrictions deemed necessary by the CDFW and/or USFWS, and included in the permit conditions. No rodenticides shall be used.
- The introduction of soil-borne pathogens shall be avoided by following the Park District's Pathogen Controls Best Management Practices.

- If Special Status wildlife species are found within or near construction areas during Project construction work, construction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the Project area (if possible). The wildlife resource agency(ies) with jurisdiction over the species shall be contacted regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the Qualified Biologist shall document the activities of the animal within the site; fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the Park District and the appropriate regulatory agency with jurisdiction over the wildlife species.
- Uncommon or previously undocumented Special Status wildlife species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).
- Before steep-walled holes or trenches are back filled, they shall be inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted to determine the appropriate method for relocation.
- Construction pipes, culverts, or other structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for Special Status species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Special Status species is discovered inside a pipe, and does not move of its own accord, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.
- Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The Qualified Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an appropriate facility. If vehicle or equipment maintenance is necessary, it may be performed in the designated staging areas, as shown on the Construction Plans or approved by the Qualified Biologist.
- Temporarily disturbed areas shall be returned to pre-project conditions or better.
- Project-related vehicles should observe a 15-mile-per-hour speed limit on unpaved access roads within the limits of construction.
- Documentation of compliance, as required by any regulatory permit conditions, with applicable state and federal laws pertaining to the protection of Special

Status wildlife and native and migratory birds and raptors shall be recorded in a daily monitoring report and made available to the CDFW as part of a post construction biological monitoring report.

Impact BIO-1b, Project-wide: General Discussion of Special Status Species Habitat. Temporary and permanent impacts to habitat occupied by Special Status species, sensitive plant communities, and jurisdictional wetlands would also occur as a result of the Project.

> Mitigation Measure BIO-1b, Project-wide: Prepare and Implement a Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and Jurisdictional Wetlands: The Park District shall implement the following mitigation measure to restore or compensate for habitat, including Special Status habitat and jurisdictional wetland areas disturbed or impacted by Project actions.

- To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for for implementing the Plan. The Plan shall include by proportionate amounts, specific habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed riparian, willow sausal, seasonal wetlands, etc).
- To facilitate preparation of the Plan, the Park District shall, prior to construction, have a botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species.

Impact BIO-1c, Project-wide: Special Status Plants. The CDFW has compiled a list of "Special Plants" (CDFW 2018), which include California Special Concern (CSC) species. This compilation includes information developed by the CNPS. These designations are given to those plant species whose vegetation communities are seriously threatened. Although these species may be abundant elsewhere they are considered to be at some risk of extinction in California. Although CSC species are afforded no official legal status under CESA, they receive special consideration during the planning stages of if Park District Land Use Plan development and any adverse impacts are considered to be significant under CEQA.

Special Status plant species have been recorded in the vicinity of the Project area and a number of Special Status plants have been verified as occurring in or near proposed construction areas during Project botanical surveys. These Special Status plants are typically associated with the historic alkali vernal pool habitat area south of Ardenwood Creek / Line P in the Southern Wetlands Natural Unit. This area contains saline-alkali soils, a relatively high brackish groundwater table, and has depressional features that pond water during portions of the rainy season that support Special Status plants. The Special Status plant species verified as occurring south of Line P/Ardenwood Creek include:

- 1. Congdon's Tarplant (Centromadia parryi ssp. Congdonii)
- 2. Lesser Saltscale (Atriplex minuscule)
- 3. San Joaquin Spearscale (Etriplex joaquinana)

In addition to these verified occurrences, several other Special Status plants generally associated with saline alkali soils or saline seasonal wetlands have a potential to occur, but were not observed during previous or current plant surveys.

- 1. Alkali milk-vetch (Astragalus tener var. tener)
- 2. Prostrate Navarretia (Navarretia prostrate)
- 3. Hairless Popcornflower (Plagiobothrys glaber)
- 4. California Seablite (Suaeda californica)
- 5. Saline Clover (Trifolum hydrophilum)

Rare plants associated with tidal marsh and saline seasonal wetlands have also been recorded in plant communities to the west of the Project area, in Coyote Hills Regional Park. None have been previously observed in the area immediately adjacent to Patterson Ranch Road and the Tuibun Trail where road improvements, utility installation, and trail widening and elevation would occur. However, there is some potential for rare plants to occur in adjacent saline seasonal wetland habitats.

The remainder of the Park Expansion Project area north of Ardenwood Creek/Line P, in the Western Wetlands and Patterson Slough Natural Units, the Ranch Road Recreation Unit, or the Historic Patterson Ranch Agricultural Unit, consists of non-saline or only very slightly saline alkali soils. Previous plant surveys and surveys conducted in association with the LUPA did not identify any rare plants in this area. The area is ruderal and weedy and rare plants are not likely to occur here.

Construction of the flood control and wetlands mitigation project elements south of Ardenwood Creek/Line P in the Southern Wetlands Natural Unit, which includes vegetative disturbance and clearing, excavation, and soil removal to create new wetlands basins would destroy any rare plants that occur in this area. Any temporary construction disturbance of habitat areas adjacent to Patterson Ranch Road and Tuibun Trail where road and utility improvements are proposed could potentially damage or destroy any rare plants that occur. This represents a *potentially significant* impact.

Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species:

The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status plants. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.

- A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for *Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000) and CDFW *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG, 2000). The Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results. and consultation with CDFW
- Locations of Special Status plants in proposed construction areas will be recorded by the qualified Botanist using a global positioning system (GPS) unit, and flagged in the field. The GPS data will be used to create digital and

hardcopy maps for distribution to construction inspectors and contractors to inform them of areas where disturbance is prohibited, or where activities are restricted.

- If initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species.
- Access may be restricted around Special Status plant populations through appropriate field direction by the Qualified Botanist. This may include signage, buffers, seasonal restrictions, and design or no access, depending on the Special Status species in question.
- The Park District and its Construction Contractors shall install a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any Qualified Botanist-required buffer areas to prevent encroachment by construction equipment and personnel. The Qualified Botanist will determine the exact location of the fencing. The fencing will be strung tightly on posts set at maximum intervals of 10 feet (3 meters), and will be checked and maintained weekly until all construction is complete in the area where Special Status plant species occur.
- No grading, clearing, storage of equipment or machinery, or other disturbance or construction activity will occur until all temporary construction fencing has been installed by the Park District, and its Construction Contractor, and inspected and approved by the Qualified Botanist.
- Special Status plant species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).
- If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 ratio based on the area of lost habitat (accurately field measured). Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas. Restoration or reintroduction may be located on-site (i.e., within the project footprint or local vicinity) or at a nearby suitable off-site area within Coyote Hills Regional Park with suitable soil and hydrologic conditions for that species. At a minimum, the Special Status plant mitigation areas shall meet the following performance standards by the fifth year after mitigation planting/seeding; as determined by monitoring, as follows.
 - The compensation area shall be at least the same size as the impact area.
 - Invasive species cover shall be less than or equal to the invasive species cover in the impact area.
 - Restored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years.

• The final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the project Habitat Mitigation and Monitoring Plan (HMMP) see BIO-1b.

ImpactsBIO-1d, Species-Specific: Impacts to Special Status Birds, Migratory Birds, and Raptors. Under the terms of the Migratory Bird Treaty Act of 1918 (MBTA), it is unlawful "by any means or manner to pursue, hunt, take, capture (or) kill" any migratory birds except as permitted by regulations issued by the US Fish and Wildlife Service (USFWS). The term "take" is defined by the USFWS to mean to "pursue, hunt, shoot, wound, kill, trap, capture or collect" any migratory bird (or any part), nest, or egg of any migratory bird covered by the MBTA, or to attempt any of those activities.

Take can also be extended to mean activities that disturb or significantly modify or degrade habitat where the effect of the activity results in the impairment of essential migratory bird behavioral patterns such as sheltering, breeding, nesting, or feeding.

The California Fish and Game Code (CFGC) also extends protection to non-migratory birds that are resident game birds (CFGC 3500) and to any birds in the orders falconiformes or strigiformes (hawks, birds-of-prey or raptors) (CFGC 3503). The golden eagle (*Aquila chrysaetos*) is a protected species under the Federal Bald Eagle and Golden Eagle Protection Act (FBGE), and is also Fully Protected under California law (CFP).

Migratory Birds

Coyote Hills Regional Park District biologists consider the willow thickets, mixed riparian forest, and nearby wetlands to be the most important and biologically productive habitats in the Park. They provide an abundant supply of insects, perching and nesting habitat, and are a food base for well over 100 species of wintering migratory and breeding birds.

Migratory birds protected by the MBTA and California law could potentially be impacted by implementation of the LUPA and Park Development Plan. Construction of recreation facilities, including parking areas, restrooms, and picnic areas in the Patterson Ranch Historic Farm and Farm Yard Agricultural Unit, and Ranch Road Recreation Unit, and trail and bridge construction, and restoration and enhancement activities in the Patterson Slough and Western Wetlands Natural Units, and flood control and wetlands creation construction work in the Southern Wetlands Natural Unit could all potentially result in modifications to habitat that could have a short term adverse impact on nesting migratory bird species. Construction noise and disturbance from work in areas near occupied nests, including the use of vibratory equipment such as for soil fill compaction and bridge pier installation that may occur during the migratory bird nesting season (Feb. 1 to Sept. 1) all could cause significantly adverse biological impacts. The loss of an active nest due to construction activities would be a violation of both CFGC 3500 and 3503, and the MBTA, and represents a *potentially significant* impact.

Raptors

Golden eagles are known to occur within the adjacent Coyote Hills Regional Park, although no golden eagle nests have been observed within the LUPA Project area. Several other raptors, including white tailed kite and northern harrier are also known to occur within and forage over the open ruderal grassy fields of the Project area.

Disturbance caused by construction activities that occur near nesting eagles, (which is un-likely to occur within the Project area), or other nesting raptors, such as white tailed kite and northern harrier, could potentially lead to nest abandonment. In addition to temporary construction-related disturbances to nesting habitat areas, recreation facility development, including new trail construction, and vegetation disturbance during restoration and enhancement activities would also

result in temporary or short term impacts to eagle and raptor foraging of ruderal grassland habitat that could potentially affect raptor foraging and prey activity, prey abundance, and prey availability within the Project area; This represents a *potentially significant* impact.

Other Special Status Bird Species

The Project area contains native vegetation that provides suitable habitat for a large number of protected or Special Status birds such as Alameda song sparrow (*Melospiza melodia pusillula*), a CDFW Species of Special Concern (CSC) and salt marsh yellowthroat (*Geothylypis trichas sinuosa*), also a CDFW CSC. Twenty two (22) Special Status birds have a moderate to high potential to occur within the Project area. Special Status bird habitat is principally along the Patterson Slough riparian corridor, the willow thickets along Patterson Ranch Road, and the Oak Grove area on the south end of the Slough. Other Special Status bird species forage in the seasonal wetlands within the Project area. In addition to the tree nesting birds, there are several species of birds such as killdeer (*Chara drius vociferous*), which nests on the ground, and other species that typically nest in areas of dense brushy vegetation, including cattail thickets.

Although non-migratory Special Status birds, and those Special Status birds that are not raptors are not afforded any legal protection under FESA, CESA, MBTA, or FBGE, they are to receive special attention during CEQA biological review of a proposed Project.

The Project could adversely affect Special Status birds if construction occurs while they are present within habitat near work areas through direct physical mortality, or because of construction disturbance and noise that may cause nest abandonment.

The proposed Park Development Plan indicates all proposed new trail and recreational facilities will maintain a 100-foot minimum setback from the edge of the Patterson Slough riparian corridor. Construction activities that occur within or immediately adjacent to potential wooded nesting habitat areas include: 1) the repair of low/wet areas of the existing Willow Trail hiking trail within the upper portion of Patterson Slough, 2) improvement of the existing maintenance access road on the southwest end of Patterson Slough to upgrade as a hiking trail (Overlook Spur), and 3) construction of the Harvest Way Trail connection to Tuibun Trail at Patterson Ranch Road, adjacent to a roadside willow thicket, and 4) disassembly of the Farm Labor Contractors residence, which has large willow branches growing over the roof. Limited tree branch trimming may be needed at all of these locations to facilitate construction work.

Ground nesting birds and existing ruderal grassland foraging habitat utilized by raptors and other Special Status birds could potentially be disturbed by non-wetland area earthwork and grading activities for construction of visitor serving facilities and trails, and by construction equipment importing soil and compost placement for enhancement and restoration, as well as by mowing for vegetation management. Tree planting for willow sausal, mixed riparian and oak savanna restoration and follow up plant establishment and vegetation management activities represents an additional temporary disturbance impact. This represents a *potentially significant* impact.

In the long term, implementation of the Project would have a beneficial effect on eagles, raptors, and Special Status and migratory birds by expanding areas of willow and riparian habitat, oak savanna, and improving plant community diversity and habitat quality in currently ruderal areas. This would result in an increase in food supply for prey animals and an improvement in foraging and nesting habitat for raptors, and other Special Status and migratory birds.

> Mitigation Measure BIO-1d, Species-Specific: Conservation Measures to Protect Special Status Birds, Migratory Birds, and Raptors.

> • If ground disturbance activities or impacts occur during the breeding season (approximately February 1 through August 31), pre-construction nesting

migratory birds, raptors and other Special Status bird species surveys shall be conducted by a Qualified Biologist. Such surveys shall include but not be limited to the following: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act, or by their status as a protected species of Special Concern.

- The pre-construction surveys shall occur within 14 days prior to the ground disturbance and vegetation removal activities. Surveys should be conducted within suitable nesting habitat within 200 feet of the area to be disturbed.
- If the survey does not identify any nesting migratory birds, raptors and other Special Status bird species in the areas potentially affected by the proposed activity, no further action is required. If nesting migratory birds, raptors and other Special Status bird species are found to occur that might be impacted by Project activities, a "no disturbance buffer" will be established around the habitat area. The Qualified Biologist will consult with CDFW to determine the size of the no-disturbance buffer, which will be marked off with temporary orange construction fencing. This buffer may vary depending on habitat characteristics and the species.

Impact BIO-1e, Species-Specific: Salt Marsh Harvest Mouse. Salt marsh harvest mouse (SMHM), a California and Federally listed Endangered Species, is known to occur in the saline seasonal wetlands containing pickleweed vegetation immediately south of the Project area (south of the Southern Wetlands Natural Unit) and separated from it by the Burrowing Owl Levee. SMHM is also known to occur within the adjacent Coyote Hills Regional Park within the saline seasonal wetlands north of Patterson Ranch Road and west of the Kiosk, and may also occur within the tidal marsh areas of lower Alameda Creek. Although suitable habitat is not present in the Park Expansion Project area for this species, it could potentially disperse into Project construction areas for road, trail, and utility work along Patterson Ranch Road, and construction of the 100 foot bridge on the north side of the DUST marsh, for instance to escape to higher ground because of flooding conditions. This species could be harmed by construction activities. This represents a *potentially significant* impact.

Mitigation Measure BIO-1e, Species Specific: Conservation Measures to Protect Habitat for Salt Marsh Harvest Mouse: Additional project-specific avoidance and minimization measures for salt marsh harvest mouse (SMHM) in areas within 200 feet of suitable habitat, such as saline seasonal wetlands near Patterson Ranch Road (pickleweed dominated areas) would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail. These measures would be consistent with those required by USFWS and CDFW, and as specified in any permit conditions. They are likely to include the following:

- Removal of vegetation where needed in areas near suitable habitat under the supervision of an agency-approved Qualified Biologist using approved methods.
- Upon verifying work zones are mouse free by a Qualified Biologist, Install species-appropriate Environmentally Sensitive Area (ESA) wildlife exclusion fencing prior to initiation of construction in potential mouse habitat areas. Exclusion fencing for Salt Marsh Harvest Mouse shall be designed with agency approved doors to allow escape of trapped mice and have a "no climb" design to ensure mice do not climb over the fence once installed.

• Check in, under and around equipment and material stockpiles for Special Status wildlife on a daily basis each morning, prior to initiation of work.

Impact BIO-1f, Species Specific, California Black Rail: California black rail (CBR), a California listed Threatened Species, was observed in 1993 along the north edge of Coyote Hills Regional Park near the Alameda Creek Flood Control Channel. It may utilize emergent marsh associated with the lower portions of the Flood Control Channel and also lower portions of Line P (Ardenwood Creek) and Like K (Crandall Creek). Suitable habitat is not provided directly within the Park Expansion Project area. However, CBR is presumed to forage and nest in the vicinity of portions of the Project area, but not directly utilize areas that would be physically disturbed by construction activities.

CBR could be impacted by construction activity if noise and disturbance occurs near occupied nesting habitat during breeding season (approximately from February 1 - August 31). These areas include:

- 1. Elevation of Patterson Ranch Road west of the existing kiosk, installation of utilities within the roadway, and elevation and widening of Tuibun Trail in the vicinity of and west of the kiosk.
- 2. Construction of the 80-foot bridge on lower Ardenwood Creek and the 100-foot bridge on the north side of the DUST marsh.

This represents a *potentially significant* impact.

Mitigation Measure BIO-1f, Species-Specific: Conservation Measures to Protect Habitat for California Black Rail during Breeding Season:

- Project specific avoidance and minimization measures for California black rail in areas within 200 feet of suitable habitat, such as saline seasonal wetlands, would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail, consistent with those required by the USFWS and CDFW as specified in any permit conditions.
- Protocol level surveys would be conducted in suitable habitat for California black rail that are within 200 feet of Project "Limits of Work" or as directed in any agency permit conditions. Surveys will be completed prior to initiation of construction each year of proposed construction activity that may potentially impact black rails.
- Protocol surveys would be conducted around dawn and/or dusk between February and March when black rails are most likely to vocalize during their breeding season.
- If active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows.

Impact BIO 1g, Species-Specific: Burrowing Owl. Burrowing owls (BO), are a CDFW CSC, and a USFWS Bird of Conservation Concern. They have been previously observed within the Project area during biological surveys completed for the Patterson Ranch Development Project EIR, as well as to the immediate south (south of the Burrowing Owl Levee and the Southern Wetlands Natural Unit). BO have also been reported in the Coyote Hills Regional Park to the west. BO were not

observed during biological investigations for the LUPA, but this species could potentially use portions of the Project area for foraging and nesting in the future.

Vegetative disturbance during clearing and construction grading activities for trails and recreation facilities construction could adversely impact BO if they are present in burrows during construction activities. This represents a *potentially significant* impact.

Mitigation Measure BIO-1g, Species Specific: Conservation Measures to Protect Habitat for Burrowing Owl:

- Burrowing owl surveys will be completed by a CDFW-approved Qualified Biologist for those portions of the Project area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols establish by CDFW and may require multiple site visits with the final survey completed no more than 14 days prior to initiation of construction activities
- Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols.

Impact BIO-1h, Species-Specific: Western Pond Turtle. Western pond turtles (WPT) have not been observed within the Park Expansion Project area during biological investigations completed for the LUPA, or in previous biological surveys. They are a CDFW CSC. Pond turtles have been reported as being present in the adjacent Coyote Hills Regional Park, and have also been documented in the CNDDB as occurring in the Alameda Creek Flood Control Channel approximately 4.5 miles upstream. The Project area contains marginally suitable habitat for this species within the ponds of Patterson Slough and within adjacent Crandall Creek. Western Pond Turtle was not documented during pre-construction biological surveys within Line-P Ardenwood Creek completed in 2016, prior to initiation of the Phase I Flood Control and Channel Restoration Project.

There is a potential that this species could move or disperse into the Project area, either from the ponds downstream within Coyote Hills Regional Park, or from upstream locations. Should this occur prior to certain construction activities, such as construction of the Crandall Creek Trail connector bridge, or the DUST Marsh Bridge, this species could potentially be injured or killed. This represents a *potentially significant* impact.

Mitigation Measure BIO-1h, Species-Specific: Conservation Measures to Protect Western Pond Turtle:

A qualified Biologist approved by the CDFW shall conduct a preconstruction biological survey for Western Pond Turtle (WPT). The survey area shall include those portions of Crandall Creek (Line-K), Ardenwood Creek (Line-P), DUST Marsh, and Patterson Slough where construction disturbance could occur, or within 500 feet of all such construction activity. The surveys shall be conducted 48 hours prior to initial construction disturbance. Any identified WPT shall be relocated, by a qualified biologist, to a suitable location approved by CDFW and outside of the Project's construction disturbance boundaries.

Impact BIO-1i, Species-Specific: Bats. There are 25 bat species that occur in California, of which 11 are classified as California Species of Special Concern (CSC) by CDFW and the Western Bat Working Group. Two CSC bat species that often roost in old structures or suitable trees are the pallid bat (*Antrozous pallidus*), and western red bat (*Lasiurus blosevilli*) Removal or substantial disturbance of occupied bat roosts without prior humane eviction or other CDFW-approved mitigation measures could result in "take," of these species. Take is defined under CESA as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

In addition to CSC bat species, non-CSC bat species are also protected under CEQA, usually when there is a potential that large local breeding populations could be adversely impacted by a proposed Project. This "CEQA" protection includes common and widely distributed bat species such as the Brazilian free-tailed bat (*Tadarida brasiliensis*). This species can form large colonies, including in old barns and farm structures.

Bats, including five Special Status bat species, have been recorded in the vicinity of and have a moderate to high potential to occur within the Project area. Bats could potentially roost in large trees along Patterson Slough, as well as in old farm buildings such as the Farm Labor Contractors Residence, and the Arden Dairy Milk House.

Roosting bats could be disturbed, injured, or killed by tree pruning l activities involved with trail construction and trail repair or by disturbance of bat occupied buildings during disassembly, moving, or historic renovation. Although no tree removal is proposed within the Project area, some tree trimming may be necessary to make minor improvements to the Willow Trail within upper Patterson Slough, for the improvement and conversion of the existing maintenance access road to become the Overlook hiking spur, as well as for disassembly of the Farm Labor Contractors Residence, all located in the Patterson Slough Natural Unit. Any building modifications for adaptive reuse of the Milk House could also impact bats that might be present in this building.

The general disturbance caused by construction activities, such as equipment noise near bat-occupied habitat, could potentiallyrouse day-roosting bats, which could cause them to abandon the construction area. Maternity roosts with young not yet able to fly could also be affected. Occupied roost trees for Special Status bats could be disturbed by construction, potentially injuring and perhaps causing mortality of bats during the breeding season. This represents a *potentially significant* impact.

Mitigation Measure BIO-1i, Species-Specific: Conservation Measures to Protect <u>Habitat for Bats</u> (along with Implementation of the City of Fremont's Standard Development Plan): In advance of tree removal and dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:

- Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, outside of bat maternity roosting season (approximately April 15 August 31), and outside of months of winter torpor (approximately October 15 February 28), to the extent feasible.
- If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the Project site where tree and

structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the Qualified Biologist.

- The Qualified Biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F.
- Removal of trees with active or potentially active roost sites shall follow a twostep removal process:
 - On the first day of tree removal and under supervision of the Qualified Biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws.
 - On the following day and under the supervision of the Qualified Biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe).
 - Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the Qualified Biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to roost.

Monarch Butterfly: Although individual Monarch Butterflies (MB) may occasionally travel from the nearby Ardenwood Farm overwintering sites to the Project area, these individuals are not likely to be impacted by Project activities. The Project area itself does not provide suitable habitat to serve as an overwintering site and no overwintering Monarch clusters have been recorded as occurring here. This represents *no impact*.

<u>Significance after Mitigation:</u> With the implementation of Mitigation Measures BIO-1a through BIO-1j, and compliance with Section 18.218.050(c), Standard Development Requirements of the City of Fremont Municipal Code, the impact of the Propose Project on species/habitat identified as a candidate, sensitive, Special Status species would be reduced to a *less than significant* level.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact BIO-2, Riparian Areas: The Project could have a substantial adverse impact on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services.

Special Status and Sensitive Natural Communities. CDFW defines Special Status Natural Communities (plant communities) as those areas which are naturally rare and whose extent has been greatly diminished through changes in land use. The CNDDB tracks 135 such natural communities in much the same way that it tracks occurrences of Special Status species. Information is collected and maintained on each Natural Community site regarding the community's location, extent, habitat quality, level of disturbance, and current protection measures. There is no California law that protects

Special Status natural communities; however, CEQA requires consideration of the potential impacts of a project on biological resources of statewide or regional significance, including what are considered to be Sensitive Natural Communities.

There are no CNDDB-tracked Special Status natural communities in the Project area. However, any riparian or jurisdictional wetland areas that are not identified as CDFW/CNDDB Special Status natural communities should also be considered a sensitive natural community. Jurisdictional wetlands within the Project area are discussed in the next section; riparian areas are discussed below.

Riparian Habitat. Riparian habitat occurs in the Project area along Patterson Slough, within the Patterson Slough Natural Unit, and additionally within the riparian habitat that was recently planted (2017) as part of the ACFCWCD Phase I Flood Control channel improvements along Ardenwood Creek/Line P in the Southern Wetlands Natural Unit. Riparian habitat does not occur along the portion of Crandall Creek nearest to the Project area.

There are no Proposed Project actions that would directly impact riparian habitat along Ardenwood Creek / Line P. The proposed 80-foot vehicular and pedestrian bridge crossing Ardenwood Creek occurs immediately downstream of and outside of Phase I Flood Control Project restoration area, and there is no riparian habitat in the vicinity of the proposed bridge.

Three Project actions would temporarily impact riparian habitat along Patterson Slough:

- 1. Disassembly of the Farm Labor Contractors Residence. There are overhanging willow tree limbs over this building that would need to be trimmed back in order for this work to be completed. Temporary riparian disturbance is estimated to be 1,500 square feet.
- 2. Improvements to the existing Willow Trail in low and ponded areas where it crosses the upper or west end of Patterson Slough. Temporary disturbance within and adjacent to riparian habitat, including willow tree limb trimming, is estimated to be 2,000 square feet.
- 3. Improvement of the existing maintenance access road in the southwest end of Patterson Slough for use as the Trail (hiking trail). Temporary disturbance activities associated with improving the existing dirt maintenance road for use as emergency vehicle access, maintenance access, and pathway would occur immediately adjacent to the Patterson Slough mixed riparian forest. Minor trimming of over-hanging willow branches may be needed along approximately 800 linear feet of the existing roadway (4,000 square feet).

None of the riparian disturbance activities involve removal of native trees, or result in the permanent disturbance of riparian habitat. Temporary riparian impacts would total less than 0.1 acres, and all disturbed areas would be restored.

The Project would result in the enhancement or restoration of a minimum of 50 to 65 acres of Mixed Riparian Forest and Willow Sausal with an additional 25 to 35 acres of adjacent oak savanna Nearly all of this restored area would also be designated as a Special Protection Feature, precluding public access. The existing Willow Trail would remain. Signage, field fencing, screening plantings, and other features would be used to discourage Park visitors and trail users from leaving designated trails and entering riparian habitat areas, including restored areas. New fencing would be designed to avoid interference with wildlife movement.

Impact significance for BIO-2 before mitigation represents a *potentially significant* impact.

Mitigation Measure BIO-2a, Project wide: Minimize Disturbance to Riparian Habitat: For work occurring immediately adjacent to riparian habitat, including willow thickets and adjacent areas of oak woodland, riparian areas shall be clearly delineated with flagging by a Qualified Biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian friendly fiber rolls (i.e., no monofilament), or other appropriate erosion control material. Material staging, trails and all other Project-related activity shall be located as far possible from riparian areas. If riparian areas cannot be entirely avoided by construction activities, any temporarily impacted areas shall be restored to pre-construction conditions or better at the end of construction (see below Mitigation Measure BIO-2b :).

<u>Mitigation Measure BIO-2b, Project-wide: Habitat Mitigation and Monitoring to</u> <u>Mitigate for Temporary Impacts to Riparian Habitat:</u> If temporary disturbance to riparian habitat within the Project area cannot be avoided, the HMMP discussed in Mitigation Measure BIO-1b, shall be implemented for riparian habitats temporarily impacted by construction activities. The Plan shall outline measures to restore, enhance, improve or re-establish riparian habitats on site.

Significance after Mitigation: With the implementation of Mitigation Measures BIO-2a and BIO-2b, and compliance with Section 18.218.050(c), Standard Development Requirements of the City of Fremont Municipal Code, the impact of the Propose Project on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services would be reduced to a *less than significant* level.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, seasonal wetland, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact BIO-3 Wetlands: This Project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, as well as to Waters of the State of California.

A preliminary wetlands delineation was conducted for the southern portion of the Project area (Southern Wetlands Natural Unit) in January 2016, and a preliminary jurisdictional wetlands determination was completed for the entire Project area in the spring of 2017. This preliminary determination is subject to verification by the US Army Corps of Engineers, and California Department of Fish and Wildlife. Project planning used the preliminary wetlands determination to develop the LUPA and Park Development Plan for the preliminary layout of all Project visitor serving facilities to avoid or minimize impacts to wetlands, including those from parking areas, restroom pad, picnic area, foot paths, multi-use trails, and bridge locations.

Seasonal wetlands occur scattered throughout the Project area, primarily in low lying areas on the west side of the Western Wetlands Natural Unit, as isolated shallow depressional ponds, and in low lying areas adjacent to Patterson Ranch, in the Patterson Slough Natural Unit. Wetlands include non-tidal saline seasonal wetlands containing pickleweed, along Patterson Ranch Road, west of the LUPA Project area, freshwater seasonal wetlands, cattail marsh, and ponded areas, such as DUST. The largest wetland areas occur adjacent to and within Patterson Slough, and within the channel banks of Ardenwood Creek (Line P), Crandall Creek, and the lower portions of the Alameda Creek Flood Control Channel. Wetlands and non-wetland Waters of the US include the above creek channel areas, a salt-grass lined drainage ditch in the Southern Wetlands Natural Unit, and a ditch system

draining the east side of the Patterson Slough Natural Unit and turning west along the outboard toe of the Crandall Creek levee.

The Proposed Project is a restoration project and would benefit State and Federally protected wetlands/waters by expanding areas near or adjacent to poor/low quality seasonal wetlands, and creating new or enhanced seasonal wetlands. Inorganic debris and invasive non-native plant species would be removed from the existing seasonal wetlands. The enhanced wetlands would have significantly improved hydrology and would provide higher quality habitat for wildlife. There would be temporary impacts to existing wetlands from removal actives of invasive species and during native plant planting and seeding, but it is estimated that new wetlands would develop significantly enhanced function within 3-5 years. Temporary impacts would be offset by the overall long-term benefits of the site restoration and enhancement.

There are no streams or wetlands identified in the Ranch Road Recreation Unit or the historic Patterson Ranch Farm and Farm Yard Agricultural Unit trail that would be impacted by trail or recreational facilities construction or new agricultural land-uses.

Construction improvements to and along approximately 2,800 LF of Patterson Ranch Road and the Tuibun Trail west of the Park Expansion area would occur immediately adjacent to jurisdictional wetlands. Temporary disturbance of these seasonal wetlands would occur during construction activities, but no permanent fill would be placed in them. Temporary wetland disturbance impacts associated with this work are estimated to be less than 28,000 sq. ft. (0.64 acres).

In addition to the named trails described in the proposed LUPA and Park Development Plan, four proposed bridges would cross over wetlands/waters:

- 1. 20-foot (existing) Crandall Trail connector bridge in Patterson Slough Natural Unit.
- 2. 100-foot DUST Marsh bridge connecting existing DUST Trail and Crandall Trail.
- 3. 80-foot vehicular/pedestrian bridge over Ardenwood Creek/Line P, Southern Wetlands Natural Unit.
- 4. 550-foot cantilever walkway attached to existing Ardenwood Creek bridge.

Each of these structures are proposed to clear-span wetlands/Waters of the U.S. and the State of California. However, the Crandall Trail connector bridge, the DUST bridge, and the lower Ardenwood Bridge would have bridge abutments and footings constructed immediately adjacent to jurisdictional wetland features. Although no permanent wetlands fill is proposed associated with bridge construction, temporary disturbance of wetlands could occur during construction activities, such as bridge pier and footing excavation, form work, and concrete pours. Temporary wetland disturbance impacts are estimated to be approximately 400 square feet for each bridge structure.

The preliminary Park Development Plans also indicate that improvements along Patterson Ranch Road west of the Park Expansion area, including elevation of low lying areas, utility installation and reconstruction of Tuibun Trail to widen and elevate it would be done in a way that avoids permanent wetland impacts. This would be accomplished by having potential road lane closures to stage construction work on roads, trails and shoulder areas, non-wetland areas and existing fill areas. Permanent wetland fill impacts would be avoided by the use of retaining walls or other structures set at the upland edge of wetlands, and/or by placement of fill on uplands where space allows. Elevated boardwalks on helical piers may be used in some areas to clear span wetlands, minimizing potential wetland fill impacts to less than 0.1 acre of fill.

Temporary wetlands disturbance could occur during willow sausal work and mixed riparian restoration in the Patterson Slough and Western Wetlands Natural Units. This would involve driving 1- to 2-inch diameter live willow and cottonwood stakes or cuttings into the ground 12 to 18 inches at typical spacing of 12 to 15 feet, as well as container plantings of native tree and shrub species. The

total wetland impacted acreage in the willow sausal restoration area is estimated to be well less than 0.05 acres. This is less than the 0.1-acre Corps Section 404 wetlands fill reporting limit. Container plants of native tree and shrub species including, hole excavation and backfill with a native soil/compost mix, watering basin creation, surface composting and browse-protection cage installation would be used for mixed riparian restoration in areas with favorable soil and hydrologic conditions adjacent to and within seasonal wetlands.

In addition to wetlands ground disturbance for the willow sausal restoration and mixed riparian forest planting for construction of trails and visitor serving facilities, shallow excavation and grading is proposed for seasonal wetlands enhancement and creation in the Western Wetlands and Patterson Slough Natural Units. Grading would occur outside of but near preliminarily identified seasonal wetlands. The proposed earthwork also includes selective removal of weed-seed bank topsoil, placement of imported clean fill, and importation and placement of compost, all in non-wetland areas. This work would be completed to improve and convert weedy ruderal areas to enhanced grasslands and would be focused on non-wetland areas that are visible from public roadways, with some areas near existing seasonal wetlands.

Grading for flood control and wetlands mitigation creation is also proposed for the area south of Ardenwood Creek, the Southern Wetlands Natural Unit. This work would be completed by ACFCWCD in coordination with the Park District. Grading in this area includes excavation to depths of 3 to 4 feet below ground surface, and disturbance of up to 50 acres of mostly non-wetlands land.

A former agricultural drainage ditch lined with salt grass that is considered to be wetlands and Waters of the US occurs within the area proposed for flood control and wetlands mitigation area creation. This 0.9-acre area is at the approximate elevation of the design bottom grade of the mitigation wetlands and would be incorporated into the proposed wetland mitigation Project design, along with any additional seasonal wetlands identified by the Corps of Engineers during the verification of the preliminary wetlands determination in this area. Temporary disturbance of these 0.9 acres of wetlands would occur during construction.

This represents a *potentially significant* impact. The following mitigation measures would address impacts to wetlands.

Mitigation Measure BIO-3a, Project-wide: Avoid and Minimize Impacts to Wetlands and Waters of the U.S. and of the State:

- The Project jurisdictional wetland delineation shall be confirmed in coordination with the US Army Corps of Engineers (USACE) and CDFW to determine the extent of Waters of the U.S. and Waters of the State within the Project area to ensure construction footprints and associated construction disturbance areas do not encroach into wetlands.
- The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the USACE, RWQCB, and CDFW to the extent feasible.

Mitigation Measure BIO-3b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Wetlands and Waters of the U.S. and of the State: If temporary disturbance or permanent loss of wetlands cannot be avoided, the HMMP (see Mitigation Measure BIO-1b) shall be implemented for wetlands or waters of the U.S. or of the State impacted by construction activities. The HMMP shall outline measures to restore, improve, or re-establish wetland habitat within Coyote Hills Regional Park to ensure compensatory mitigation requirements for wetland impacts are satisfied.

Significance after Mitigation: With the implementation of Mitigation Measures BIO-3a and BIO-3b, the impact of the Proposed Project on federally protected wetlands as defined by Section 404 of the Clean Water Act and impacts on wetlands and Waters of the State of California through direct disturbance and soil removal, filling, hydro-modification, or other means would be reduced to a *less than significant* level.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Wildlife nurseries are unique habitat areas that contain plant species and cover densities for protected breeding and nesting or denning, rearing young until they are capable of being on their own, and that have ready access to nearby sources of food and water.

Wildlife movement corridors and habitat linkages are defined as connections between habitat areas that allow for physical movement and the genetic exchange between isolated populations. These linkages may serve a local purpose, such as providing a connector between foraging and denning areas, or they may be more regional in nature. Some habitat linkages also serve as wildlife migration corridors, where animals periodically move through the corridor, and then return. Other corridors, such as streams or rivers, may serve as important passages for anadromous fish migration from a marine (Bay) environment into freshwater streams in order to reproduce. A group of habitat linkages in an area are said to form a wildlife corridor network.

Several features of the Proposed Project design will allow wildlife unimpeded movement, while preventing human access into wildlife areas. For example, the 4-foot field fences would have a gap at the base to allow small mammals and amphibians to crawl underneath and cross fenced areas. Larger mammals would be able to leap over the proposed fencing.

The mixed riparian forest along Patterson Slough within the Patterson Slough Natural Unit provides a locally important wildlife nursery and also serves as a wildlife movement corridor between the Coyote Hills and wetlands to the west, and suburban areas to the east. Ardenwood Creek/Line P, Alameda Creek and Crandall Creek (located offsite to the immediate north), are also important wildlife movement corridors, with Alameda Creek supporting runs of steelhead salmon. The Patterson Slough riparian corridor contains sycamores, willows, and coast live oak, and provides good nesting habitat to migratory birds, as do the scattered willow thickets along Patterson Ranch Road, west of the Project area.

Implementation of the Proposed Project would not impede the use of a native wildlife nursery site or migratory wildlife corridor. The proposed Park Development Plan, including the layout of parking areas, the restroom and picnic facilities, and the trail network, would avoid potential impacts to wildlife movement corridors and riparian areas. Landscaped areas associated with proposed picnic facilities are more than 100 feet away from the riparian corridor edge, with the paved parking area approximately 125 feet away at its nearest point. The proposed East Slough and Patterson Slough Overlook spur that lead to wildlife observation platforms are respectively more than 420 feet and 100 feet away from the edge of the riparian corridor. The Patterson Slough Overlook Spur footpath follows an existing dirt maintenance access road to a former developed area used previously for farm labor housing. Disassembly of the Farm Labor Contractors Building using small equipment and hand tools would also occur immediately adjacent to the southwest end of Patterson Slough.

Construction of the footpath connection to the existing Crandall Creek Trail, the bridge across Ardenwood Creek, and the cantilever bridge over Alameda Creek at Ardenwood Boulevard all would occur within wildlife movement corridors, but the bridges and trail structures would be clearspan and not block or inhibit movement. The proposed Ardenwood Creek cantilever bridge structures would not impact anadromous fish movement. When the Proposed Project is completed, it would enhance existing habitat and create substantial new habitat for wildlife in the project vicinity. Proposed Project biological impacts associated with wildlife nursery sites and wildlife and fish movement corridors represent a *less than significant* impact.

Habitat fragmentation occurs when connected sensitive plant communities or natural areas, including those areas that serve as nesting and foraging habitat and wildlife movement corridors, become disjointed by habitat removal, by conversion to urban or agricultural uses, or by construction of physical barriers, separating important habitat areas. The natural landscape could potentially be bisected by construction of project elements and features, such as roads and trails, into smaller, more isolated, and less functional natural habitats that make wildlife movement and habitat use more difficult. Habitat fragmentation is not a specific topical area in the Biological Significance Criteria, but is evaluated in this section to provide additional understanding of potential effects the project may have on biological resources.

The proposed Park Expansion area was intensively farmed for more than 150 years and the majority of the 306-acre area is ruderal grassland, farmed or fallow fields. The notable exception is the approximately 12-acre Patterson Slough riparian area located in the Patterson Slough Natural Unit. No new trails or other public access facility are proposed to be constructed within or across Patterson Slough that would bisect or fragment this existing habitat. No new trails will be constructed immediately parallel to this riparian corridor and all new trails are a minimum of 100 feet from its edge. The proposed Overlook Spur foot path that runs along the west side of Patterson Slough on its southwestern end and would use an existing dirt Park maintenance road. This road and existing disturbed area is used for equipment staging for vector control, mowing, and grazing.

In some areas, new multi-use trails and hiking trails are proposed that would pass through current ruderal grasslands, fallow fields and near poor quality seasonal wetlands that would be restored to oak savanna, enhanced grasslands and enhanced seasonal wetlands. These existing and new trails would also be used for emergency vehicle and maintenance access. Multi-use trails and footpaths would also use flood control maintenance roads that would be created as a continuing part of the Phase 1 Flood Control and Wetlands Mitigation project. All visitor-serving facilities and new trails would be constructed prior to or coincident with habitat restoration and enhancement.

The environmental baseline from which biological impacts of the project are evaluated, is based on site conditions as of May 14, 2018 – the date the CEQA Notice of Preparation was issued for the project. As noted in the environmental setting section, the Patterson Slough Natural Unit already experiences disturbances associated with Park District maintenance staff activities, and mosquito and vector control operations. There is also a more than 20-year history of Park visitor use of the Tuibun, Willow, and Crandall Creek Trails, all within the Patterson Slough Natural Unit. Based on the above analysis, there would be *no impact* on wildlife nurseries or wildlife movement corridors associated with implementation of the proposed LUPA and Park Development Plan.

e. Conflict with applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

East Bay Regional Park District is a State of California established Special District with the authority to "acquire land...to plan...develop, and operate a system of public parks, and to do all other things necessary or convenient to carry out the purposes of the District." As a Special District, it develops and adheres to its own policies and ordinances pertaining to such things as land management and trail construction and operation.

Portions of the Proposed Project south of Ardenwood Creek/Line P (the Southern Wetlands Natural Unit), including flood control facilities and wetlands mitigation construction, would be constructed by and in cooperation with the ACFCWCD, which is also authorized by the State of California to develop and implement policies, procedures and plans for management of water resources, including flood protection, water quality and habitat management, and stormwater management requirements.

The Park District cooperates with local agencies, including cities, counties and other special districts, such as water districts, in complying with their ordinances and regulations, where applicable, such as building, grading and stormwater management.

The Proposed Project would conform to local, state and federal policies and ordinances related to protection of vegetation, water, fish and wildlife resources. Mitigation measures proposed as part of the project or recommended as part of this EIR would ensure sensitive resources are adequately protected or mitigated in compliance with the goals and objectives set forth in the City of Fremont General Plan and related ordinances, as well as the adopted policies and ordinances of the Park District and the ACFCWCD.

City of Fremont Ordinances

There are three City of Fremont (local) ordinances that provide for protection of biological resources: 1) Tree Protection Ordinance) Watercourse (stream) Protection Ordinance, and 3) Standard Development Requirements to Protect Resources. As noted above, compliance with these local ordinances may not be applicable to all parts of the Project area, and all proposed Project actions, but are undertaken cooperatively by the Park District whenever possible. Some of the Project actions are also covered under the Park District's Charter and enabling legislation, but the City ordinances provide useful criteria for evaluating biological impacts under CEQA, and serve as mitigation measures. In addition, portions of the Project area are also covered by an Agricultural and Open Space Easement Agreement that provides guidance for restoration and resource management. Park District policies regarding protection and conservation of biological resources are also applicable.

City of Fremont Tree Protection Ordinance. A Tree Removal Permit is needed for any non-native tree proposed to be removed that is greater than 6 inches in diameter, or any native tree greater than 10", as measured at breast height (DBH).

No trees greater than 6 inches DBH are proposed to be removed by the Project. The limbs of some over-hanging arroyo willow trees in the vicinity of the Farm Labor Contractors Residence would need to be trimmed back during building disassembly. Another large tree occurs in the vicinity of the Historic Milk House Building. However all roads, trails, and parking areas in this vicinity have been laid out to avoid this tree and all other native trees potentially subject to City ordinance.

The City's Tree Ordinance also addresses "landmark trees". There are no recognized landmark trees that are identified in the City's 2012 Landmark Trees publication. Several of the large coast live oak trees that occur north of Patterson Ranch Road and just west of Paseo Padre Parkway may potentially be worthy of consideration as possible landmark trees, but none of these trees would be removed or damaged as part of the Proposed Project.

The Park District's Standard Specifications are that the Project's Construction Plans show the precise location of important trees, with the protection of existing native trees at their drip lines through installation of temporary construction fencing to minimize accidental tree damage. The LUPA and Park Development Plan indicate that all native trees are to be protected and preserved, and would be fenced at their drip lines prior to start of each phase of construction.

City of Fremont Watercourse Ordinance. The Watercourse Protection Ordinance prevents removal of healthy vegetation beyond that needed for maintenance, and prohibits alteration or disturbance of

creek banks. In addition, the Ordinance prohibits "development" within 30 feet of the center line of a creek or 20 feet from the top of the bank, whichever is greater.

The Proposed Project's Park Development Plan is consistent with this Ordinance. The Project's proposed recreational facilities and trail are in voluntary compliance with the City of Fremont watercourse regulations. The parking lot is located approximately 125 feet from the vegetated edge of Patterson Slough, picnic tables are approximately 100 feet or more from the vegetated Patterson Slough edge, the east Slough wildlife observation platform is located more than 450 feet away, and the Overlook (west) Slough Spur wildlife platform is also located over 100 feet away from the riparian edge of the Slough.

The north-south trending Oak Trail, located on the east side of Patterson Slough, is also over 100 feet from edge of Patterson Slough at its closest point. Proposed trails traverse portions of a current ruderal weedy area that will be converted to oak savanna, concurrent with or following trail construction.

City of Fremont Standard Development Requirements. Fremont Municipal Code Ordinance 28-2018 (December 2015) provides Standard Development Requirements to Protect Resources, including biological resources and Special Status species. The specific biological resources addressed in this Ordinance are for: 1) burrowing owl, 2) nesting birds, and 3) roosting bats. The Proposed Project Mitigation Measures for biological resources are consistent with or exceed these requirements.

Agricultural and Open Space Easement. Large portions of the Project Area are covered by an Open Space Easement Agreement and an Agricultural Easement Agreement. The Park District and the City of Fremont are parties to this agreement. Habitat restoration, enhancement, protection and public access facilities including trails and wildlife observation platforms, are allowable uses within the Open Space Easement.

East Bay Regional Park District Resource Protection Policies. The Park District also has a number of Policies in its 2013 Master Plan that address protection of biological resources. These include maintenance, management, conservation, enhancement and restoration of natural (biological) resources, including rare, threatened, endangered and locally important species, and their habitat. There are also policies for adaptive management for resources protection associated with climate change. The LUPA and Park Development Plan were developed using these as guidance documents, and are consistent with these Policies.

Based on the above review and analysis, there would be *no impacts* associated with potential conflicts with local ordinances or policies.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or State habitat conservation plan.

The Project site area is not located within the boundaries of a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). However, the Park Expansion Project site is immediately adjacent to the area comprising Segment R in the South Bay Region that is addressed in the *Baylands Ecosystem Habitat Goals Report* of 1999, as updated in 2016. Proposed improvements to Patterson Ranch Road, including utility upgrades and improvements to the Tuibun Trail and the DUST Marsh pedestrian bridge, are within this area. The Goals Report noted that the "diked baylands east of Coyote Hills support the largest remaining willow grove in the baylands ecosystem, seasonal wetlands and diked wetlands, and a permanent freshwater pond". Specifically the Goals Report under the "Unique Restoration Opportunities" section states that "on the eastern side of the Coyote Hills, there are seasonal wetlands and willow grove habitat that could be restored or enhanced. The Goals Report recommends that the site protect and enhance willow groves and seasonal wetlands.

The Proposed Project is consistent with this recommendation in that approximately 130 acres of land in the Patterson Slough and Western Wetlands Natural Unit would be restored or enhanced as

willow sausal, mixed riparian forest, oak savanna, or seasonal wetlands and enhanced foraging grasslands. Approximately 80 acres of these habitat types would be created in the area south of Ardenwood Creek (the Southern Wetlands Natural Unit) as part of the ACFCWCD Phase 1 Ardenwood Creek Flood Control and Wetlands Mitigation area project.

The Project would not conflict with any adopted NCCP/HCP, approved conservation plan or local plan. There would be *no impact*.

Cumulative Analysis

The following projects in the vicinity of the Proposed Project site are proposed or approved. No nearby projects were under construction at the time this EIR was prepared.

Proposed Projects

Four office buildings on Campus Court. Four office buildings on Campus Court, east of Paseo Padre Parkway and the Project site, were entitled through the Ardenwood Technology Park Planned District Amendment.²⁸ The four buildings would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Replacement of Agricultural Well on Project Site. The Park District is in the process of replacing an existing, nonfunctional agricultural well on the south side of Patterson Ranch Road with a deeper well. Although this will occur on the Project site, it is a separate project to support an existing agricultural operation that has already been initiated, and is not addressed in this CEQA document except in the analysis of cumulative projects.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure will have a maximum of 8,700 square feet, and will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open views of the nearby marsh. Planning and conceptual design for the new Visitor Center are currently underway.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was prepared. This work involves grading two, 2- to 3-foot-deep off-channel basins that will be

²⁸ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District Project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under final phases of construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This project involves development of the former Dumbarton rock quarry, located south of the Project site, into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard. This project is under construction, and is expected to open in late 2019.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.²⁹ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

Cumulative Impacts of the Proposed Project

As listed above, several projects are known to be in the planning stages or are under construction in the Project vicinity. The potential impacts of the cumulative projects on biological resources tends to be site-/project-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on each project. This includes preservation and protection of native vegetation (grasslands, woodland, and riparian areas), populations of Special Status plant or animal species, and wetland features (including seasonal wetlands, ponds, and stream channels). For the most part, the related projects would increase public access and protect, enhance, or restore wetlands and wildlife habitat or sensitive communities within the vicinity of the LUPA Project area. Further environmental review of specific development proposals in the vicinity of the Project site would serve to ensure that important biological resources are protected and properly managed, and to prevent any significant adverse development-related impacts to biological resources. The City of Fremont's Standard Development Requirements, Tree Protection Ordinance, and Watercourse Protection Ordinance further serve to mitigate the impacts

²⁹ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

of Cumulative Analysis projects on biological resources. For Park District projects within the Cumulative Analysis project listing, the Park District's Ordinance 38 and adopted District BMPs also serve to mitigate biological impacts. Nevertheless, when combined with the effect of past projects, the current projects identified in the Project vicinity, and probable future projects would result in a significant loss of biological resources. This is a significant cumulative impact on biological resources in the City of Fremont and adjacent unincorporated areas.

The Proposed Project's design, and implementation of mitigation measures identified above, would reduce the impacts of the project on sensitive biological resources to a less-than-significant level, and thus would serve to address Project-related contribution to cumulative impacts on biological and wetland resources. Therefore, the Proposed Project would not have a cumulatively considerable impact on biological resources because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. The cumulative impact of the Proposed Project on biological resources would be *less than significant*.

4.2 Cultural and Tribal Cultural Resources

This section provides the environmental and regulatory background necessary to analyze the impacts of the proposed Coyote Hills Restoration and Public Access Project to cultural and tribal cultural resources. This section contains information from the cultural resources technical report prepared by Basin Research Associates for the Proposed Project.³⁰ Preparation of this report included a records search, a review of pertinent literature, consultation with local Native Americans, and a focused field review.

Regulatory Framework

Federal Laws and Regulations

National Historic Preservation Act (NHPA), Section 106

Section 106 of the NHPA (36 CFR 800) requires federal agencies and those they fund or have approval authority over to consider the effects of their actions on properties that may be eligible for listing or are listed in the National Register of Historic Places (NRHP). To determine whether an undertaking could affect NRHP eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. Although compliance with Section 106 is the responsibility of the lead federal agency, in this case the U.S. Army Corps of Engineers (USACE), others can undertake the work necessary to comply with Section 106. The Section 106 process entails four primary steps, listed below.

- 1. Initiation of consultation with consulting parties (36 CFR 800.2)
- Identification and evaluation of historic properties within the Area of Potential Effects (APE) (36 CFR 800.4)
- 3. Assessment of adverse effects on historic properties within the APE (36 CFR 800.5)
 - ◆ If there are historic properties that will be affected, consult with the CA State Historic Preservation Officer (SHPO) regarding adverse effects on historic properties. This consultation will result in a memorandum of agreement (MOA), if determined appropriate (36 CFR 800.5(d)(2))
 - ◆ If there are no historic properties that will be affected, implementation of the Project in accordance with the findings of no adverse effect shall proceed (36 CFR 36 800.5(d)(1))
- 4. Resolution of adverse effects and proceeds in accordance with the MOA, if determined appropriate (36 CFR 800.6).

National Register of Historic Places (NRHP)

Criteria for Evaluation

Cultural resources significance is determined using the NRHP's Criteria for Evaluation at 36 CFR 60.4, which state that a historic property is any district, site, building, structure, or object:

- a) that is associated with events that made a significant contribution to the broad patterns of our history (Criterion A);
- b) that is associated with the lives of persons significant to our past (Criterion B);

³⁰ Basin Research Associates, Historic Property Survey Report/ (Historic Properties Present), Coyote Hills Regional Park Expansion Area, East Bay Regional Park District Coyote Hills Regional Park, Fremont, Alameda County, California. February 2018.

- c) that embodies the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possesses high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); and/or
- d) that has yielded, or may be likely to yield, information important in prehistory or history (Criterion D).

In addition to meeting one or more of the criteria identified above, the resource must typically be at least fifty (50) years old.³¹

Archaeologists generally evaluate archaeological resources using Criterion D in order to determine their potential to yield information. Criterion D emphasizes the importance of the information encompassed in an archaeological site rather than its inherent value as a surviving example of a particular architectural type, or its historical association with an important person or event. If the SHPO determines that a cultural resource is eligible for inclusion to the NRHP, then it is automatically eligible for the California Register of Historic Resources (CRHR). If a resource does not have the level of integrity necessitated by the NRHP, it may still be eligible for the CRHR, which allows for a lower level of integrity (see below).

Seven Aspects of Integrity

Cultural resources integrity is determined using the NRHP's seven aspects of integrity at 36 CFR 60.4, which state that a historic property must not only be shown to be significant under the National Register criteria, but it also must retain historic integrity. The seven aspects of integrity include location, design, setting, materials, workmanship, feeling, and association. A property must meet one or more of the Criteria for Evaluation before a determination can be made about its integrity (National Register Bulletin 15).

Clean Water Act

The Proposed Project may potentially require analysis in accordance with Section 404(b)(1) of the Clean Water Act (codified at 33 U.S.C. § 1344) and if a Section 404 (wetlands fill) permit is required for any part of Project implementation, must comply with the regulatory requirements of the Department of the Army, Corps of Engineers (Corps) with regard to cultural resources (historic properties). The Corps (San Francisco District) is the National Environmental Policy Act (NEPA) responsible entity and is required to complete the federal regulatory requirements for cultural resources pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) (54 U.S.C. § 306108) and its implementing regulations 36 CFR Part 800 associated with any Section 404 permit review and approval. The regulations require a federal agency with jurisdiction over a federal, federally assisted or federally licensed undertaking to take into account the effort of the undertaking on properties listed on or eligible for the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking should it adversely affect a NRHP eligible or NRHP listed property. The criteria for determining NRHP eligibility are found in 36 CFR Part 60.

The Park District is the lead local agency and the Corps (San Francisco District) is the lead federal agency for the Project if a Section 404 permit is determined to be necessary. The Corps is responsible for consulting with the California State Historic Preservation Office (SHPO) on their identification and evaluation efforts and on the effects, if any, of the undertaking upon Historic Properties in

³¹ U.S. Department of the Interior, National Park Service, National Register Criteria for Evaluation, Available on the internet at http://www.nps.gov/nr/publications/bulletins/nrb15_2.htm. Accessed 22 May 2012.

accordance with 54 U.S.C. § 302303(b)(5), (b)(6) and (b)(9). The Park District is required to determine the potential impacts of the construction on both historical and archaeological cultural resources and mitigate impacts on any significant resources located that may be affected by the Project to a less than significant effect in accordance with the California Environmental Quality Act (CEQA). The SHPO is the final reviewing party.

The following discussion of local and state laws and regulations relating to cultural resources, and presents additional discussion of California Public Resources Code §5097.98 regarding human remains. The next section summarizes the applicable cultural resources policies and protective measures of the City of Fremont.

State Laws and Regulations

California Environment Quality Act (CEQA)

The CEQA Statute and Guidelines (Title 14 of the California Code of Regulations 15064.5) include procedures for identifying, analyzing, and disclosing potential adverse impacts to historical resources. CEQA defines a "historical resource" as a resource that meets any of the following criteria:

- A resource listed in, or determined to be eligible for listing in, the NRHP or CRHR.
- ♦ A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code (PRC), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- A resource identified as significant (e.g., rated 1-5) in a historical resource survey meeting the requirements of PRC Section 5024.1(g) (Department of Parks and Recreation Form 523), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered "historically significant" if it meets the criteria for listing on the CRHR.

CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (PRC Section 21084.1) and defines substantial adverse change as demolition, destruction, relocation, or alteration that would impair historical significance (PRC Section 5020.1).

Where a project may adversely affect a unique archaeological resource, PRC Section 21083.2 requires the Lead Agency to treat that effect as a significant environmental effect. A unique archaeological resource is defined as (PRC 21083.2 (g)):

An archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information,

(2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or,

(3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

When an archaeological resource is listed in or is eligible to be listed in the CRHR, PRC Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. PRC Sections 21083.2 and 21084.1 operate independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. Either of these benchmarks may indicate that a project may have a potential adverse effect on archaeological resources.

California Register of Historical Resources (CRHR)

Criteria of Evaluation

The CRHR is a listing of State of California resources that are significant within the context of California's history, and includes all resources listed in or formally determined eligible for the NRHP. The CRHR is a statewide program of similar scope to the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR. A historic resource must be significant at the local, state, or national level under one or more of the following criteria defined in the CCR Title 14, Chapter 11.5, Section 4850:

- 1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (Criterion 1); or
- 2. It is associated with the lives of persons important to local, California, or national history (Criterion 2); or
- 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion 3); or
- 4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4).

In addition to meeting one or more of the criteria identified above, the resource must typically be at least fifty (50) years old so that sufficient time has passed to understand its historical significance.^{32,33} Any resource that meets one of the above criteria, is more than fifty years old, and retains its historic integrity is considered an historical resource under CEQA.

Tribal Cultural Resources

Assembly Bill 52 (AB 52) provides protections for tribal cultural resources.³⁴ All lead agencies as of July 1, 2015 approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe,³⁵ to consult with such tribe regarding the impacts of a project on tribal cultural resources prior to the release of any negative declaration, mitigated negative declaration or draft environmental impact report. Under PRC Section 21074, tribal cultural resources include site features, places, cultural landscapes, sacred places or objects that are of cultural value to a tribe that are eligible or listed on the CRHR or a local historic register or that the lead agency has determined to be a significant tribal cultural resource.

³² Title 14 California Code of Regulations, Section 4852(d)(2). Available on the internet at: http://www.archive.org/stream/ca.ccr.14.2/ca.ccr.14.2_djvu.txt. Accessed 22 May 2012.

³³ U.S. Department of the Interior, National Park Service, National Register Criteria for Evaluation, Available on the internet at: http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm. Accessed 22 May 2012.

³⁴ AB 52 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3 to, the California Public Resources Code.

³⁵ The Native American Heritage Commission maintains a list of more than 100 federally recognized California tribes and an additional list of tribes not recognized by the federal government but listed as non-recognized California tribes. Both groups have the right to request notification and consultation under the AB 52.

Tribal consultation is to continue until mitigation measures are agreed to or either the tribe or the lead agency concludes in good faith that an agreement cannot be reached. In the case of agreement, the lead agency is required to include the mitigation measures in the environmental document along with the related Mitigation Monitoring and Reporting Program (MMRP) (see PRC Section 21084.3). If no agreement is reached, the lead agency must still impose all feasible measures necessary for a project to avoid or minimize significant adverse impacts on tribal cultural resources (PRC Section 21084.3).

California Public Resources Code §5097.98

Section 5097.98 (Notification of Native American human remains, descendants; disposition of human remains and associated grave goods) mandates that the lead agency adhere to the following regulations when a project results in the identification or disturbance of Native American human remains:

- 1. Whenever the Native American Heritage Commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendents shall complete their inspection and make their recommendation within 24 hours of their notification by the commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
- 2. Whenever the Native American Heritage Commission is unable to identify a descendent, or the descendent identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendent, and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Other California Laws and Regulations

Other state-level requirements for cultural resources management appear in PRC Chapter 1.7, Section 5097.5 (Archaeological, Paleontological, and Historical Sites) and Chapter 1.75 beginning at Section 5097.9 (Native American Historical, Cultural, and Sacred Sites) for lands owned by the state or a state agency.

Local Regulations and Policies

East Bay Regional Park District Master Plan

The East Bay Regional Park District Master Plan (Master Plan) defines the long-term vision for lands managed by the Park District. The Master Plan provides a decision-making framework for Park District management, and identifies policies that will achieve district-wide objectives. Park development objectives, land use classifications, and planning and management guidelines are established by the Master Plan. Policies for the preservation and interpretation of cultural resources are woven throughout the Master Plan, including provisions for public participation, interpretation, environmental compliance, open space protection, land acquisition, land use planning, and facility development. Those policies most pertinent to cultural resources in the Project Area are summarized below.

- Interpretation. The Park District will provide a variety of interpretive programs that focus attention on the region's natural and cultural resources. Programs will encourage an appreciation for the preservation of natural and cultural resources, and will provide for volunteer opportunities.
- Environmental Compliance. The Park District will develop all planning documents in compliance with CEQA [and, as part of the review process, will consider potential impacts to cultural resources].
- Facility Development. Park improvements will be designed to avoid or minimize impacts on wildlife habitats, plant populations, and other resources.

East Bay Regional Park District Ordinance 38, Sections 805-808

Portions of Park District Ordinance 38 address the disturbance of objects or features of cultural significance on Park District lands. Each section is briefly summarized below.

- Section 805. This section states that no person shall damage, injure, collect or remove earth, rocks, sand, gravel, fossils, minerals, features of caves, or any article or artifact of geological interest or value located on Park District parklands. Though oriented toward natural features, this ordinance may be construed as applying to objects or features that, while appearing natural, are actually modified by human action (e.g., cave pictographs misperceived as natural discoloration).
- ◆ Section 806. This ordinance states that no person shall damage, injure, collect or remove any object of paleontological, archaeological or historical interest or value located on Park District parklands. In addition, any person who willfully alters, damages, or defaces any object of archaeological or historical interest or value or enters a fenced and posted archaeological or historical site shall be arrested or issued a citation pursuant to California Penal Code §622.5.
- Section 807. This ordinance states that special permission may be granted to remove, treat, disturb, or otherwise affect plants or animals or geological, historical, archaeological, or paleontological materials for research, interpretive, educational, or park operational purposes.
- Section 808. This ordinance states that no person shall cut, carve, paint, mark, paste, or fasten on any tree, fence, wall, building, monument, or other property in the Park District, any bill, advertisement, directional or informational signs, or inscription whatsoever.

EBRPD Guidelines for Protecting Parkland Archaeological Sites

The document entitled *EBRPD Guidelines for Protecting Parkland Archaeological Sites*³⁶ contains guidance for Park District staff on the treatment of archaeological sites in the Project Area. Guidance is provided about archaeological site identification and protection; Native American input regarding proposed treatment of archaeological sites and human remains; and special zoning concessions for Native American and non-Native American archaeological sites.

City of Fremont Municipal Code

Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code contains the following requirements for cultural resources:

³⁶ East Bay Regional Park District, 1989. Oakland, California.

(c) Cultural Resources.

(1) Notification, Affiliated California Native American Tribes. Prior to preparation of an environmental assessment and within 14 days of determining that an application for a project is complete, the city shall provide formal notification to the designated contact or a tribal representative of traditionally and culturally affiliated California Native American tribes that have requested to receive such notice from the city. The pritten notification shall include a brief description of the Proposed Project and its location, project contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to AB 52.

(2) Accidental Discovery of Cultural Resources. The following requirements shall be met to address the potential for accidental discovery of cultural resources during ground disturbing excavation:

(A) The project proponent shall include a note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.

(B) The project proponent shall retain a professional archaeologist to provide a preconstruction briefing to supervisory personnel of any excavation contractor to alert them to the possibility of exposing buried cultural resources, including significant prehistoric archaeological resources. The briefing shall discuss any cultural resources, including archaeological objects, that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery protection and notification of the project proponent and archaeological team.

(C) In the event that any human remains or historical, archaeological or paleontological resources are discovered during ground disturbing excavation, the provisions of CEQA Guidelines Sections 15064.5(e) and (f), and of subsection (c)(2)(D) of this section, requiring cessation of work, notification, and immediate evaluation shall be followed.

(D) If resources are discovered during ground disturbing activities that may be classified as historical, unique archaeological, or tribal cultural resources, ground disturbing activities shall cease immediately, and the planning manager shall be notified. The resources will be evaluated by a qualified archaeologist and, in the planning manager's discretion, a tribal cultural monitor. If the resources are determined to be historical, unique archaeological, or tribal cultural resources, then a plan for avoiding the resources shall be prepared. If avoidance is infeasible, then all significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. Any plan for avoidance or mitigation shall be subject to the approval of the planning manager.

(E) As used herein, "historical resource" means a historical resource as defined by CEQA Guidelines Section 15064.5(a); "unique archaeological resource" means unique archaeological resource as defined by Cal. Pub. Res. Code § 21083.2(g); and "tribal cultural resource" means tribal cultural resource as defined by Cal. Pub. Res. Code § 21074. Collectively, these terms describe "significant cultural materials."

City of Fremont General Plan

The Community Character Element of the City of Fremont General Plan (adopted 2011) includes the following goal and policies for the protection of cultural resources:

Goal 4-6: Historic Preservation and Cultural Resources

Conservation and enhancement of Fremont's historic sites, buildings, structures, objects, and landscapes into the 21st Century and beyond.³⁷

Policy 4-6.1: Protection of Historic Resources

Identify, preserve, protect and maintain buildings, structures, objects, sites and districts

³⁷ City of Fremont, 2011. City of Fremont General Plan. Adopted December 2011.

which are reminders of past eras, events, and persons important in local, state, or national history.

Policy 4-6.10: Protection of Native American Remains

Coordinate with representatives of local Native American organizations to ensure the protection of Native American resources and to follow appropriate mitigation, preservation, and recovery measures in the event such resources could be impacted by development.

City of Fremont Historical Architectural Review Board

For disassembly or demolition of the Labor Contractors Residence, and any exterior improvements/modifications to other potentially historic structures, such as the Milk House Building, Historic Architectural Review by the City of Fremont is required. The Historic Architectural Review will be subject to review and approval of the Historic Architectural Review Board and City Council (for demolition of the potentially historic residence), based on the City of Fremont Historic Resources Ordinance, Municipal Code Section 18.175, which regulates demolition, alteration, and relocation of Register and Potential Register Resources and development proposals affecting resources.

Existing Conditions

The following information is summarized from the cultural resources technical report prepared by Basin Research Associates for the Proposed Project.³⁸ As part of the research for this cultural resources report, Basin Research Associates contacted the California Historical Resources Information System (CHRIS), Northwest Information Center. The Northwest Information Center is one of nine regional Information Centers that maintain a part of the CHRIS Inventory for their respective geographic areas, including information provided by the California Office of Historic Preservation (OHP).

History of the Site

The general study area appears to have been situated in a favorable environment for prehistoric use with water and a variety of ecological niches available for prehistoric subsistence activities and raw material procurement. Native American occupation sites in the Project area appear to have been selected for accessibility, protection from seasonal flooding, and proximity to a diversified resource base. Sea-level changes over the past 6000-8000 years also have influenced site location and distribution especially along the bay margins. It should be noted that the Coyote Hills formation was interpreted as an island by Father Fray Pedro Font during the Second Anza expedition of 1775-1776. Prior to 5,000-4,500 years ago, Native American use of the San Francisco Bay region appears to have been intermittent and sparse. Evidence of early occupation along the bayshore may have been hidden by rising sea levels from about 15,000 to 7,000 years ago or buried under sediments caused by bay marshland infilling along estuary margins from 7,000 years onward.

The Project area is primarily within the ethnographic and historic boundaries of the Native American group known as the *Costanoan* (also as the *Ohlone*) and is generally within the area attributed to the *Chochenyo* group but also includes a portion of the area attributed to the *Tamyen* group.

Early groups probably focused on hunting and the gathering of various plant foods along with shellfish collection. Archaeological information suggests a slow steady increase in the prehistoric population over time with an increasing focus on permanent settlements with large populations in

³⁸ Basin Research Associates, Historic Property Survey Report/ (Historic Properties Present), Coyote Hills Regional Park Expansion Area, East Bay Regional Park District Coyote Hills Regional Park, Fremont, Alameda County, California. February 2018.

later periods. This change from hunter-collectors to an increased sedentary lifestyle is due both to more efficient resource procurement as well as a focus on staple food exploitation, the increased ability to store food at village locations, and the development of increasing complex social and political systems including long-distance trade networks. Prehistoric site types recorded in the general area consist of shell mounds, lithic scatters, quarries, temporary and semi-permanent habitation sites including main villages with associated burial areas, bedrock mortars or other milling feature sites, petroglyph sites, and isolated burial locations.

The period of initial historic exploration of the Project area started in 1769. Even though the routes of the early explorers cannot be determined with total accuracy, a number appear to have been to the east and inland of the vicinity of the Project area. These include the expeditions led by Ortega, who reached Alameda Creek in 1769; Pedro Fages in 1772; Anza and Font in 1776; and the later Spanish expedition of Hermenegildo Sal accompanied by Fray Antonio Danti who ascended to the top of the Coyote Hills in 1795.

As one of seven missions in Ohlone territory, Mission San Jose had a great impact on the aboriginal population living in the study area. Mission San Jose was the leading producer of food and cattle for many of the other missions. During the Hispanic Period, settlement was concentrated around Vallejo Mills (in present-day Niles) as well as at Mission San Jose (located on Mission Boulevard in present-day Fremont). Under the Spanish, all land was controlled by either the missions or the pueblos. After Mexico seceded from Spain in 1822, land grants to private citizens increased significantly.

After the secularization of the missions and the American takeover of California during the 1840s, the assets of Mission San Jose, including land and livestock, dwindled. The Proposed Project is situated within the southern part of the Rancho Potrero de los Cerritos, a temporary grant by Governor Alvarado on November 29, 1842 and final grant in fee by Governor Micheltorena on March 21, 1844 to Tomas Pacheco and his brother-in-law, Agustin Alviso. The rancho was patented to them on February 21, 1866 for 10,610.26 acres. None of the known adobe and other buildings and features dating from 1776 to about 1850 associated with the Rancho Potrero de los Cerritos were located in the vicinity of the Proposed Project.

In 1848, California became a United States territory with the signing of the Treaty of Guadalupe Hidalgo that ended the war between the United States and Mexico. California became a state in 1850, and in 1853, Alameda County was created and soon thereafter it was subdivided into six townships, including Washington (which consisted of the present-day cities of Fremont, Newark and Union City) in the southern half of the county.

By the early 1870s, the roads joining the towns of Washington Township created the primary system of traffic arteries still found today in Fremont/Union City area. Throughout most of its history, Washington Township has been primarily a collection of small agricultural communities. The area's agricultural economy was significant in northern California for over 160 years - from the founding of Mission San Jose in 1797 until the 1960s.

The Gold Rush of 1848 brought a massive influx of immigrants from all parts of the world. As many of these new immigrants became discouraged with gold mining, they sought a more stable livelihood as farmers and ranchers. The new increase in population also created a domestic market for agricultural products that had never existed before. Once the owners of the Mexican ranchos obtained clear title to their land, they typically sold off parcels to the newcomers who started small family farms. A typical homestead in early California was from 160 to 640 acres, where a farmer raised hay, grain and livestock.

After the railroad arrived in Washington Township in 1869, the agricultural economy changed from grain to fruit cultivation over the next 10 years. In almost every area in the county served by adequate rail transportation the big grain ranches were subdivided into small holdings. The railroad provided a way to move fruit to market while still fresh, and improvements in refrigerated rail cars made it possible to ship fresh produce longer distances. The development of the canning industry also created new methods of preserving and storing for later consumption.

During the 20th century, Washington Township developed into a diverse agricultural community. Washington Township remained primarily a rural, agricultural community until the late 1950s. The long agricultural tradition in southern Alameda County, however, came to an end only with the onset of urbanization in the late 1950s. With the construction of the Nimitz Freeway (at that time originally Highway 17 and now Interstate Route 880) in 1957, residential subdivisions started to replace the farms and ranches in Washington Township. Before the construction of the Nimitz, the main traffic arteries joining the area to Oakland and San Jose were two lane highways: the Hayward-Niles Road (now Mission Boulevard) and State Route 17 (now Fremont/AlvaradoBoulevard).

Washington Township remained a collection of eight unincorporated, rural towns until after World War II. In 1956, the towns of Niles, Centerville, Irvington and Mission San Jose and Warm Springs incorporated as the City of Fremont in response to a community desire for local planning to control new suburban development. Washington Township's 1950 population of about 20,000 increased to over 100,000 by 1970. The small family farm, the basis of Washington Township's agricultural economy for over 100 years, became obsolete as agribusiness based in the Central Valley increasingly dominated California agriculture. Major new commercial developments accompanied the development of the new residential subdivisions during the 1960s. Fremont was one of the fastest growing cities in California in the 1970s and 1980s. The 1980s boom in new high technology industrial plant construction was accompanied by much new residential construction. This pattern continues with the area considered a northernmost extension of Silicon Valley with numerous tech firms located in the expanding business parks and industrial areas. Today, Fremont and Union City are completely urbanized with a combined population of over 290,000.

Paleontological Resources

Franciscan Formation deposits, which have the potential for containing invertebrate and vertebrate fossils, underlie the Project site and Coyote Hills Regional Park.

Native American Cultural and Tribal Cultural Resources

As part of the research for the cultural resources technical report mentioned above, Basin Research Associates contacted the Native American Heritage Commission (NAHC) for a search of the Sacred Lands File for the Project site. The NAHC recommended contacting six individuals/groups to determine if any tribal cultural resources are located within the area(s). One Native American, Mr. Andrew Galvan (The Ohlone Indian Tribe) was noted as having information on Sacred Land File site(s). A focused field inspection in association with Mr. Galvan was completed August 22, 2017 to locate and discuss unrecorded prehistoric resources known to Mr. Galvan based on his previous observations in the area.

A portion of prehistoric archaeological site CA-ALA-13 (P-01-000034) is within the Project site. This site has been determined eligible for the National Register of Historic Places (NHRP) by a consensus through Section 106 process. It is listed in the California Register of Historical Resources (CRHR), and the Fremont Register of Historic Resources. As a result of dike construction, agricultural activities, and dredging in the twentieth century, much of the archaeological resource has been destroyed. Most of the recorded ALA-13 site is outside the Project site. Archaeological testing of

ALA-13 to a depth of 5.2-6.5 feet deep within the Project site did not expose any prehistoric or historic cultural materials indicating that the prehistoric resource did not extend into the Project area.

Two unrecorded prehistoric midden exposures were identified by Andrew Galvan, The Ohlone Indian Tribe, during a site visit. One midden exposure is present within the Project site. Another unrecorded midden exposure is adjacent to the Project site boundary.

A small "shell midden" deposit is present at two locations along the west side of Paseo Padre Parkway within the Project site. Archaeological presence/absence testing program exposed disturbed fill interpreted as redeposited shell midden lacking integrity. One small unidentifiable fragment of human bone was recovered during testing in 2007 and was transferred to Andrew Galvan, The Ohlone Indian Tribe, acting as the Most Likely Descendant, as designated by the Native American Heritage Commission. This suggests that the disturbed midden could potentially yield isolated prehistoric objects and human bone important to The Ohlone Indian Tribe.

Two prehistoric archaeological sites have been recorded within 0.25 miles of the Project site: CA-ALA-329 (P-000105), also known as Nelson Mound #329 (listed on the Fremont Register of Historic Resources), and CA-ALA-465 (P-01-000236) (Ryan Mound or Newark #2), a shell scatter with midden and minor other cultural material.

Built Environmental Cultural Resources

Two historic era archaeological sites have been recorded within 0.25 miles of the Project site: CA-ALA-448H (P-01-000170), the former "W. Imlay" EuroAmerican farm house and CA-ALA449H (P-01-000171), the former "A. Ross " EuroAmerican farm house, both dating to ca. 1850-1860s.

Ardenwood Historic Farm, which is located approximately 0.5 miles east of the Project site, is a working farm maintained by the East Bay Regional Park District. It contains the historic Patterson House and the Victorian Garden, which looks much like it did near the turn of the twentieth century.

Two architectural properties/complexes have been recorded within the Project site: the Arden Dairy Milk House at 6525 Paseo Padre Parkway within the Farm Yard Agricultural Unit (Oak Tree Produce Complex) (P-01-010837), and the Patterson Ranch Labor Contractors Residence located about a quarter-mile to the north of the milk house at 6330 Patterson Ranch Road (P-01-010838). Both appear eligible for the CRHR.

Arden Dairy Milk House

The Arden Dairy Milk House, 6525 Paseo Padre Parkway (P-01-010837), is one of seven buildings within the Farm Yard Agricultural Unit (Oak Tree Produce Complex). It is a circa 1940 structure which once served as a milk house (i.e., a dairy farm building that provided cold storage for raw milk prior to its delivery to a creamery for pasteurization and bottling). Alterations to the Milk House building have been relatively minor. It is the sole remnant of the circa 1923 Arden Dairy, a farmstead that included four large barns, mostly demolished circa 1990 when Paseo Padre Parkway was extended through the complex.

The Arden Dairy Milk House appears to have been established in the context of this World War Iera land reclamation activity near the Coyote Hills and appears to be eligible for listing on the California Register of Historic Resources (CRHR) under Criterion 1, for its "significant contribution to the broad patterns of California's history and cultural heritage."³⁹ The structure bears an important

³⁹ Woodruff Minor, Stuart Guedon, Melody Tannam, Basin Research Associates, 6525 Paseo Padre Parkway, California Department of Parks and Recreation Primary Record #P-01-010837, August 2007.

relationship to the agricultural history of Fremont as a rare surviving example of an agricultural building associated with the dairy industry. The period of significance extends from ca. 1923 to 1961, the estimated date of construction until the closing of the Arden Dairy and the adaptation of the farmstead to other agricultural uses.

As a work of architecture, the building appears to be eligible under Criterion 3, because it embodies "the distinctive characteristics of a type, period, region, or method of construction." The building is a largely intact and distinctive example of an early 20th century milk house, once associated with an important local dairy, exhibiting in its form the transition from hand- to machine-milking.

Patterson Ranch Labor Contractors Residence

The Patterson Ranch Labor Contractors Residence, located at 6330 Patterson Ranch Road (P-01-010838), is a one-story, wood-frame residence 28 feet wide by about 46 feet long, painted red with white trim. It was built circa 1937 to provide housing for the ranch's labor contractor – the person who procured the services of seasonal workers for various tenant farmers. Later the house served as a residence for the ranch's livestock manager.

The house is now abandoned and is in fair to poor condition, although it appears to retain a high degree of architectural integrity.⁴⁰ It appears to be eligible for listing on the CRHR under Criterion 1, history. The structure bears an important relationship to the agricultural history of Fremont as a rare surviving example of an agricultural building associated with farm workers on the area's largest ranch. As a mid-20th century example, it embodies the persistence of the type within the region's farming economy. The period of significance extends from 1937 to 1956, from the date of construction until the incorporation of Fremont.

Standards of Significance

For purposes of this EIR, the Project would have a significant impact on cultural and tribal cultural resources if it would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in the California Code of Regulations Section 15064.5;
- b. Cause a substantial adverse change in the significance of an archaeological resource as defined in the California Code of Regulations Section 15064.5;
- c. Directly or indirectly destroy a unique paleontological resource or unique geologic feature;
- d. Disturb any human remains, including those interred outside of formal cemeteries; or
- e. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public

⁴⁰ Architectural Resources Group, Conditions Assessment and Recommendations, Patterson Ranch Labor Contractors Residence, June 30, 2017.

Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impacts Discussion

Project Analysis

The following discussion incorporates information from the cultural resources report prepared by Basin Research Associates.⁴¹

a. Cause a substantial adverse change in the significance of a historical resource as defined in the California Code of Regulations Section 15064.5

Historic Era Archaeological Sites

The two recorded historic era archaeological sites near the Project site, CA-ALA-448H (P-01-000170), the former "W. Imlay" EuroAmerican farm house and CA-ALA449H (P-01-000171), the former "A. Ross " EuroAmerican farm house, are both located outside the Project site and would not be affected by the Proposed Project.

Arden Dairy Milk House

As discussed above, the Milk House is a rare surviving example of an agricultural building associated with the dairy industry, a largely intact and distinctive example of an early 20th century milk house. It is considered an historic architectural resource for purposes of this EIR

Under the Proposed Project, the Milk House building would be protected from deterioration and weather damage, and may be rehabilitated for use as a fresh produce stand or other compatible park serving use.

Impact CUL-1: Project construction could disturb the Arden Dairy Milk House on the site, a historic building. This represents a *potentially significant* impact.

<u>Mitigation Measure CUL-1a:</u> The Park District shall retain the Arden Dairy Milk House in its current location to maintain integrity of location. Annual inspections by Park District maintenance staff shall be conducted each year to assess the building's interior and exterior condition, including weather tightness and vandal resistance. Following inspection, repairs and maintenance shall be conducted as necessary in a timely fashion. Repairs and maintenance activities and prioritization shall be guided by the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995).

<u>Mitigation Measure CUL-1b:</u> If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and*

⁴¹ Basin Research Associates, Historic Property Survey Report/ (Historic Properties Present), Coyote Hills Regional Park Expansion Area, East Bay Regional Park District Coyote Hills Regional Park, Fremont, Alameda County, California. February 2018.

Guidelines for Rehabilitating Historic Buildings (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont.

Significance after Mitigation: With the implementation of Mitigation Measures CUL – 1a and CUL – 1b, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on the Arden Dairy Milk House would be reduced to a *less than significant* level.

Patterson Ranch Labor Contractors Residence

As discussed above, the Contractors Residence is a rare surviving example of an agricultural building associated with farm workers on the area's largest ranch. As a mid-20th century example, it embodies the persistence of the type within the region's farming economy.

Under the Proposed Project, the Contractors Residence building would be disassembled and its materials salvaged for reuse as an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would cause a substantial adverse change to this historic building on the Project site. This represents a *potentially significant* impact.

<u>Mitigation Measure CUL-2a</u>: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interior-qualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board.

<u>Mitigation Measure CUL-2b:</u> In concert with Mitigation Measure CUL-2a, the Park District shall install an interpretive display or signage for public exhibition concerning the history of the historical resource at the site or provided to local historical societies and libraries.

Significance after Mitigation: With the implementation of Mitigation Measures CUL – 2a and CUL – 2b, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on the Patterson Ranch Labor Contractors Residence would be reduced, but would remain a *significant unavoidable* impact.

b. Cause a substantial adverse change in the significance of an archaeological resource as defined in the California Code of Regulations Section 15064.5

Unrecorded Prehistoric Midden Exposures

As discussed above, an unrecorded midden exposure is present along the south bank of Patterson Slough near Patterson Ranch Road within the Project site, and another unrecorded midden exposure

is near the entry kiosk at the Chochenyo Trail adjacent to the Project site boundary. These middens may contain human remains.

"Shell Midden" Within the Farm Yard Agricultural Unit

As discussed above, a small "shell midden" deposit is present at two locations within the Farm Yard Agricultural Unit (Oak Tree Produce Complex) along the west side Paseo Padre Parkway within the Project site. One small unidentifiable fragment of human bone was recovered in 2007, suggesting that the disturbed midden could potentially yield isolated prehistoric objects and human bone important to The Ohlone Indian Tribe.

Impact CUL-3: Excavation and earth moving activities for the Proposed Project could have an adverse impact on the two unrecorded midden exposures, and the "shell midden" deposit present at two locations within the Project site. These middens may contain human remains, as well as currently undiscovered Native American cultural objects and human remains.

As discussed in Chapter 3, Project Description, Cultural Resources Management Actions, above, construction work involving excavation that could potentially impact cultural resources would be conducted under the observation of a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people.

<u>Mitigation Measure CUL-3a</u>: In order to mitigate potential adverse impacts to Native American cultural objects discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by a qualified Archaeologist meeting the Standards of the Secretary of the Interior. The Archaeologist shall, in accordance with *EBRPD Guidelines for Protecting Parkland Archaeological Sites*⁴², identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in accordance with the recommendations of the evaluating Archaeologist in consultation with the East Bay Regional Park District, as Lead Agency, and CEQA Guidelines §15126.4 (b)(3)(C). Such mitigation may include additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that prehistoric human remains might be encountered.

<u>Mitigation Measure CUL-3b</u>: If Native American human remains are discovered during construction, implement Mitigation Measure CUL-5.

Significance after Mitigation: With the implementation of Mitigation Measures CUL-3a and CUL-3b, compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, and observation of construction work involving excavation that could potentially impact cultural resources by a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people, as called for in the Project description, the impact of the Proposed Project on Native American cultural objects would be reduced to a *less than significant* level.

⁴² East Bay Regional Park District, 1989. Oakland, California.

c. Directly or indirectly destroy a unique paleontological resource or unique geologic feature

There are no unique geologic features at the Project site, although the Coyote Hills, located within the adjacent Coyote Hills Regional Park, are considered a unique geological resource. The Proposed Project would not affect the geologic feature of the Coyote Hills.

The Project site is relatively flat and underlain by surficial deposits of soil. Soil is unlikely to contain paleontological resources. However, the rocks of the nearby Coyote Hills are part of the "Franciscan" terrain of the Jurassic age, one of the oldest formations in the East Bay. The Franciscan Formation has the potential for containing invertebrate and vertebrate fossils, although it is not particularly fossil rich. The Proposed Project would involve excavation to a depth of up to seven feet for utility installation, which could potentially impact fossil containing rock units. This represents a *potentially significant* impact.

Impact CUL-4: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could impact fossil containing rock units.

<u>Mitigation Measure CUL-4:</u>. The Park District shall be notified if fossils and possible unique geological features are uncovered during construction of the Proposed Project. Work shall halt within 50 feet of the find until the situation can be assessed by a qualified Geologist or Paleontologist. The Geologist or Paleontologist shall identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. Mitigation may include avoidance of the resource; preparation of a treatment plan that could require recordation, collection, and analysis of the discovery; or curation of the collection and supporting documentation in an appropriate depository. All feasible recommendations of the Geologist or Paleontologist shall be implemented.

<u>Significance After Mitigation:</u> With the implementation of Mitigation Measure CUL-4, the impact to fossils and unique geological features would be *less than significant*.

d. Disturb any human remains, including those interred outside of formal cemeteries.

Due to the intensity of the settlement of Native American people in the Project vicinity, and the known middens at the Project site, there is the potential of encountering Native American human remains during earth disturbing activities of Project construction.

Impact CUL-5: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on currently undiscovered human remains.

<u>Mitigation Measure CUL-5</u>: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the Park District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per

PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Significance after Mitigation: With the implementation of Mitigation Measure CUL-5, which has been recommended by the Most Likely Descendant designated by the Native American Heritage Commission, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on human remains would be reduced to a *less than significant* level.

e. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Sections, 21074, 5020.1(k), or 5024.1.

As previously described above, in Regulatory Framework, under subheading "Tribal Resources," a Tribal Cultural Resource (TCR) is defined as a site, feature, place, cultural landscape (which must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources, or if the East Bay Regional Park District, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resources as a TCR.

As discussed under impact discussions CUL-3 and CUL-5, impacts from development of the Proposed Project on the site could impact known and unknown archaeological resources including Native American artifacts and human remains. Impacts would be reduced to a less-than-significant level with implementation of Mitigation Measures CUL-3a and CUL-5 (CUL-3b).

Compliance with existing federal, State, and local laws and regulations, and East Bay Regional Park District and City of Fremont General Plan cultural resource preservation policies (listed above), would protect both known and unrecorded TCRs on the Project site by providing for the early detection of potential conflicts between development and resource protection, and by preventing or minimizing the material impairment of the ability of archaeological deposits to convey their significance through excavation or preservation. Implementation of Mitigation Measures CUL-3a and CUL-5 would reduce any impacts to TCR discovered on the Project site as a result implementation of the Proposed Project.

Impact CUL-6: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on known and currently undiscovered tribal cultural resources on the Project site.

Mitigation Measure CUL-6a: Implement Mitigation Measure CUL-3a.

Mitigation Measure CUL-6b: Implement Mitigation Measure CUL-5.

Significance after Mitigation: With the implementation of Mitigation Measures CUL-3a and CUL-5, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on tribal cultural resources would be reduced to a *less than significant* level.

Cumulative Analysis

The following projects in the vicinity of the Proposed Project site are proposed or approved. No nearby projects were under construction at the time this EIR was prepared.

Proposed Projects

Four office buildings on Campus Court. These buildings were entitled through the Ardenwood Technology Park Planned District Amendment.⁴³ They would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Replacement of Agricultural Well on Project Site. The Park District is in the process of replacing an existing, nonfunctional agricultural well on the south side of Patterson Ranch Road with a deeper well. Although this will occur on the Project site, it is a separate project to support an existing agricultural operation that has already been initiated, and is not addressed in this CEQA document except in the analysis of cumulative projects.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure would have a maximum of 8,700 square feet, and the Project will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open views of the nearby marsh.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was prepared. This involves grading two, 2- to 3-foot-deep off-channel basins that will be connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the

⁴³ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This amendment would allow development of a former rock quarry into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.⁴⁴ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

Cumulative Impacts of the Proposed Project

The effect of the combination of past projects, the current projects identified in the Project vicinity, and probable future projects could result in a significant loss of cultural and archaeological resources, including historic architectural resources, and Native American middens and human remains. This is a significant cumulative impact on cultural resources.

Mitigation measures identified above would reduce the impact of the Proposed Project on archaeological resources, tribal cultural resources, and human remains to a less-than-significant level. Mitigation measures identified above also would reduce the impact of the Proposed Project on the historic Milk House to a less-than-significant level, but would not reduce the impact of disassembly of the Contractors Residence to a less-than-significant level. This component of the Proposed Project would result in a significant unavoidable adverse impact to the historic Contractors Residence. Given the past destructive activities on the Project site, and the significant unavoidable impact on the Contractors Residence, the Project would have a cumulatively considerable impact on cultural resources, when viewed in connection with the effects of past, current and probable future projects. The impact of the Project on cultural resources would be *significant and unavoidable*.

⁴⁴ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

4.3 Transportation and Traffic

This section describes the transportation and traffic conditions in the area surrounding the Coyote Hills Restoration and Public Access Project (Project), and identifies transportation impacts and required mitigation measures associated with the implementation of the Proposed Project. The analysis includes a summary of the relevant regulatory setting and existing conditions, and it addresses potential impacts to intersections and roadway segments; and pedestrian, bicycle, and transit networks. Significant impacts and mitigation measures (as necessary) are identified to address these impacts. This section is based on a transportation report prepared by a qualified transportation engineering consultant.⁴⁵ The transportation report included parking and traffic counts conducted on June 23, 2017 (summertime counts are more likely to capture peak activity at Coyote Hills Regional Park), and an analysis of Level of Service at the intersection of Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road (see **Appendix C**).

Regulatory Framework

Applicable State, County, and local transportation/traffic plans and regulations that are relevant to the Project area are summarized below. Streets in the Project vicinity are generally under the jurisdiction of the City of Fremont. State facilities in the Project vicinity which are under Caltrans' jurisdiction include State Route 84.

State Laws and Regulations

California Department of Transportation (Caltrans)

Caltrans owns and operates California's highway system. SR 84, a Caltrans facility, is a major roadway providing access to the Project area from San Mateo and western Santa Clara counties. Caltrans maintains a volume monitoring program and reviews local agencies' planning documents to assist in its forecasting of future volumes and congestion points.

Local Regulations and Policies

The Metropolitan Transportation Commission (MTC)

The Metropolitan Transportation Commission (MTC) is responsible for transportation planning for the Bay Area as a whole, and is the federally designated Metropolitan Planning Organization for the Bay Area. Its *Regional Transportation Plan* covers a 20-year time framework and is updated every 2 years. The MTC administers State funding for transportation projects.

Alameda County Transportation Commission

The Alameda County Transportation Commission (Alameda CTC) was created by a merger of the Alameda County Congestion Management Agency (ACCMA) and the Alameda County Transportation Improvement Authority (ACTIA) in July 2010. It is managed by elected officials and their representatives from all of the cities in the County, and a County elected official. The merger resulted in a more efficient and streamlined project delivery system for Alameda County transportation projects, including improvements for vehicular safety, travel efficiency, and congestion relief, and for bicycle and pedestrian travel.

The Alameda CTC plans, funds and delivers transportation programs and projects that expand access and improve mobility with the objective of fostering a more vibrant and livable Alameda County. The Alameda CTC coordinates countywide transportation planning and prepares the expenditure plan for the half-cent sales tax approved by Alameda County voters in 2000. This includes preparing

⁴⁵ Parisi Transportation Consulting, Coyote Hills Regional Park Expansion Traffic Impact Report, February 2019.

the County-wide Transportation Plan, the Congestion Management Program (CMP), as well as the Countywide Bicycle and Strategic Pedestrian Plans.

The CMP establishes thresholds for designated roadways. For most projects, the Alameda CTC Technical & Policy Guidelines uses a 100-trip PM Peak (increase) threshold, which if exceeded, would require a detailed traffic study. The Park District is not subject to this requirement for projects that generate more than 100 new peak hour trips because it is not considered a "local jurisdiction".

Several advisory committees, composed of staff representatives from each city and the county, provide technical guidance to the Alameda CTC. In addition, a separate Bicycle and Pedestrian Advisory Committee (BPAC) composed of citizens appointed by the cities and county make recommendations to the Alameda CTC and staff on development and implementation of bicycle and pedestrian programs, including the updating of the countywide plans.

Association of Bay Area Governments (ABAG) San Francisco Bay Trail

Senate Bill 100, passed into law in 1987, directed ABAG to develop a plan for a trail around the Bay. The *Bay Trail Plan*, adopted by ABAG in 1989, described the 500-mile proposed alignment; design guidelines for trail width, surface, and grades; a set of policies to guide the future selection, design, and implementation of routes; and strategies for implementation and financing.⁴⁶ ⁴⁷ The *Bay Trail Plan* describes a main alignment or Bay Trail spine, and side trails, called Spur Trails, where the Bay Trail does not follow the shoreline. Although ABAG is not a regulatory agency, the *Bay Trail Plan* provides guidance that is used by cities, counties, and special districts in planning for non-motorized vehicles. Projects are evaluated for adherence to the *Bay Trail Plan* policies and routes. In the Project vicinity, the designated Bay Trail is the concrete path on the west side of Ardenwood Boulevard and Paseo Padre Parkway south of Alameda Creek.

City of Fremont

City of Fremont General Plan

Applicable Goals, policies and implementation programs contained in the Fremont General Plan⁴⁸ include:

Goal 3-1: Complete Streets: City streets that serve multiple modes of transportation while enhancing Fremont's appearance and character.

<u>Policy 3-1.3</u>: Transit-Friendly Street Design. As appropriate, apply street design and development standards that require transit-supportive facilities such as bus stop curb extensions, bus shelters, benches, lighting, sidewalks, and convenient access to bus stops.

Implementation 3-1.3.A: Bus Stop Locations. Work with transit providers to ensure that bus stops and shelters are sited in appropriate locations and are designed to maximize rider comfort and safety.

⁴⁶ Alameda County Transportation Commission website, www.actc.org,

⁴⁷ABAG, 2009. Bay Trail Plan. Adopted July 1989.

⁴⁸ City of Fremont, 2011. *City of Fremont General Plan*. Adopted December 2011.

Implementation 3-1.3.B: Designing With Transit. Utilize guidelines provided by transit providers for accommodating transit vehicles on city streets and incorporating transit facilities into new development and redevelopment.

<u>Policy 3-1.5</u>: Improving Pedestrian and Bicycle Circulation. Incorporate provisions for pedestrians and bicycles on city streets to facilitate and encourage safe walking and cycling throughout the city.

Implementation 3-1.5.B: Bike Route Design. On designated bike routes, develop striped bicycle lanes and off-road bicycle trails rather than shared bike/auto lanes. Design standards for bicycle lanes and trails should be consistent with those used by the State of California.

Implementation 3-1.6.C: Pedestrian Crosswalks at Signalized Intersections. Provide enhanced pedestrian crossing times at locations with high pedestrian volumes and with large numbers of special needs and/or elderly residents. Install "countdown crosswalks" to improve the safety of pedestrian crossings. Also, consider the use of diagonal crosswalks at appropriate locations which require motorists in all directions to periodically stop for pedestrian crossings from all four corners of an intersection.

Goal 3-2: Reducing Vehicle Miles Traveled. Improve mobility in Fremont while reducing the growth of vehicle miles traveled.

<u>Policy 3-2.3</u>: Pedestrian Networks. Integrate continuous pedestrian walkways in Fremont's City Center, Town Centers, residential neighborhoods, shopping centers, and school campuses. Place a priority on improving areas that are not connected by the City's pedestrian network, with the objective of making walking safer, more enjoyable, and more convenient.

Implementation 3-2.3.E: Improving Pedestrian Mobility. Improve crossings for pedestrians at key intersections through pavement changes, curb redesign, landscaping, countdown crosswalks, and other measures which improve safety and ease of travel.

Implementation 3-2.4.B: Connecting the Trail System. Connect recreational trails in City and regional parks, access trails along creeks and flood control channels, and sidewalks and bike lanes on local streets to fill the gaps and improve the continuity of the city's bike and pedestrian trail system. Require right-of-way dedication from development projects to complete the system.

<u>Policy 3-2.6</u>: Bus Service Improvements. Achieve a level of public bus service that makes taking the bus a convenient, affordable, reliable, and safe alternative to driving.

Implementation 3-2.6.A: Bus Transit Improvements. Work with local bus transit providers to improve service levels in Fremont, and to adjust routes to maximize access to transit by persons who live or work in Fremont. A priority should be placed on improving feeder service from neighborhoods to BART, improving service between the five Town Centers, improving north-south service on Fremont Boulevard, closing service gaps in the Ardenwood and Warm Springs areas, and providing better service to local institutions. Improving feeder service to BART is particularly important, as it can reduce the necessity of driving to the BART station. This can reduce parking demand around BART, as well as overall vehicle miles traveled.

Goal 3-3: Accessibility, Efficiency and Connectivity. Maximize the efficiency of the transportation network, and its ability to connect the city, minimize travel distances, and increase mobility for all residents.

<u>Policy 3-3.6</u>: Road Hazards. Minimize road hazards associated with overgrown vegetation, structures blocking sight lines, and other visual obstructions. New development should be reviewed to ensure that ingress and egress locations, driveways, crosswalks, and other circulation features, are sited to minimize accident hazards.

Implementation 3-3.6.A: Traffic Control Devices. Install traffic control devices (signals, stop signs, etc.), streetlights, and other measures to enhance safety and reduce road hazards.

Goal 3-4: Balancing Mobility and Neighborhood Quality. A transportation system that balances speed and convenience with the desire to have walkable neighborhoods and an enhanced sense of place.

<u>Policy 3-4.2</u>: Variable Level of Service Standards. Adopt variable standards for traffic speed and travel delay that recognize the character of adjacent land uses, the functions of different streets, the different modes of transportation on a street or corridor, and other community development goals. The following standards shall apply: For locations outside of the City Center, Town Centers, and Warm Springs / South Fremont BART Station area (as depicted on the Future Land Use Map), peak hour levels of service for signalized intersections should generally be maintained at Level of Service (LOS) "D" for minor arterials and collector streets, and LOS "E" for regional (CMA network) arterials. The design and construction of new signalized intersections and roadways in areas outside the City Center, Town Centers, and Warm Springs BART Station area should achieve a target operational capacity of midpoint LOS D or better upon completion.

Implementation 3-4.2.A: Redefining Level of Service (LOS). Develop new ways of calculating LOS which are based on people rather than vehicles. Such measures could take into account the relative volumes of transit users, pedestrians, carpoolers, and bicyclists passing through an intersection or along a road segment during a given time period and not solely the number of cars. Until new standards are developed, the City will continue to use its current standards and methods for calculating LOS.

Implementation 3-4.2.B: Multi-Modal Design. Adopt a formalized procedure for evaluating and analyzing intersections that considers the needs of each transportation mode and its relationship to adjacent land uses.

Implementation 3-4.2.C: Improvements to Other Travel Modes. Require improvements to transit, bicycle, and pedestrian modes when vehicular improvements would be inconsistent with Policy 3-4.2.

<u>Policy 3-4.3</u>: Allowing Decreased Levels of Vehicle Speed and Convenience. In addition to the conditions stated in Policy 3-4.2, allow decreased levels of speed and convenience on a case by case basis in areas where:

- Widening or altering a roadway would conflict with environmental, historic, or community character objectives;
- A significant cause of the congestion is regional traffic beyond the City's control;
- Substantial transportation improvements have already been required and further mitigation is not feasible;
- There are other factors related to accommodation of pedestrians, bicyclists, and public transit, and road improvements that may be substantially detrimental to the desired capacity, convenience, safety, or efficiency of these other travel modes; or

• Congestion is of a limited duration due to special events or organized activities at local public facilities.

Implementation 3-4.3.A: Conditions for Allowing Reduced LOS. Develop specific findings, conditions, and/or CEQA thresholds for reduced roadway levels of service. Until a new approach for mitigating traffic impacts is developed, existing operating procedures shall be followed.

<u>Policy 3-4.7</u>: Transportation and the Environment. Ensure that investments in transportation infrastructure, including roads, BART, rail lines, bus-only lanes, bike lanes, and pedestrian bridges are sited and designed in a way that complements the natural and built environments.

Implementation 3-4.7.A: Transportation and Sensitive Natural Features. Ensure that proposed transportation facilities are designed and constructed to avoid or minimize potential impacts on wetlands, steep slopes, and other environmentally sensitive areas.

Implementation 3-4.7.B: Transportation and Historic Resources. Ensure that transportation improvements respect and conserve identified historic structures, sites and landmark trees whenever feasible.

<u>Policy 3-5.2</u>: Regional Trail Development. Promote and coordinate the planning of pedestrian and bicycle trail systems with Alameda County, Newark, Milpitas, Union City, Santa Clara County, ABAG, BCDC, Park District, SFPUC, ACFC, and other jurisdictions and organizations. In addition to the City of Fremont's Bicycle Master Plan, there is also a Countywide Bicycle Plan for Alameda County. One of the purposes of the Countywide Plan is to coordinate the efforts of the cities, the East Bay Regional Park District (which has its own Bicycle Plan), and other agencies that do more localized or focused bicycle planning. The Countywide Plan also focuses on linkages to adjacent counties.

Implementation 3-5.2.A: Bay Trail and Ridge Trail. Support completion of the Bay Trail and the Ridge Trail through Fremont and establish trail connections across the city between these two regional networks.

<u>Policy 3-5.5</u>: Coordination with Adjacent Cities and Other Public Agencies Coordinate with Newark, Milpitas, Union City, and other nearby jurisdictions and local public agencies to ensure compatible plans and road development standards and to coordinate major transportation investments. This should include coordination with the Fremont Unified School District on the provision of school bus service and school-related traffic issues.

The 2018 Fremont Bicycle Master Plan⁴⁹ also includes specific goals, policies and actions intended to guide bicycle program implementation within the City. Relevant goals, policies and actions include:

Goal 1: Implement a safe, convenient, connected, and comfortable citywide bicycling network for people of all ages and abilities who live, work, and visit Fremont.

<u>Policy 1-1:</u> Implement the All Ages and Abilities Vision Bicycle Network presented in the 2018 Bicycle Master Plan, with a focus on access to and connection between the Priority Development Areas (PDAs), transit stations, and employment centers.

Action 1-1A: Implement the near-term All Ages and Abilities Backbone Network identified in Chapter 5 by 2021 so that anyone living, working or visiting Fremont is always within 1/2 mile of the bikeway network, or 1/4 mile if they are within the PDAs.

⁴⁹ Fehr & Peers, City of Fremont Bicycle Master Plan, Adopted by City Council on July 10, 2018.

<u>Policy 1-2</u>: Provide maintenance and targeted expansion of the City's trail system that integrates seamlessly with the on-street bicycle network, serves its diverse population, and respects and protects the integrity of its natural and cultural resources.

Action 1-2A: Coordinate closely with East Bay Regional Parks District, San Francisco Bay Trail, and neighboring jurisdictions in planning, designing, and funding Fremont's trail system.

Action 1-2B: Coordinate with stakeholders and across City departments to ensure that all development and roadway projects shall implement bikeways and paths, such as the East Bay Greenway, Niles Canyon Trail, Dumbarton Bridge to Quarry Lakes Trail, Bay Trail, and Public Utility Commission trails and provide access points to these.

Action 1-2C: Enhance access to trails from the City's roadway network through the provision of paths, walkways, trail crossings, curb cuts, and other infrastructure to integrate parks, open space, and trails with the City's on-street bicycle network and sidewalk network.

Goal 2: Prioritize bicycle safety to support the City's Vision Zero Policy to significantly reduce fatalities and severe injuries by 2020.

Policy 2-1: Work to reduce the rate of injury bicycle crashes, particularly fatal and severe injuries, to zero.

<u>Action 2-1D:</u> Prioritize bicyclists as the City implements its *Vision Zero Policy Action Plan*, such as through the installation of the all ages and abilities bikeways and intersection improvements, and expanding bicycle safety programs.

Policy 2-2: Proactively plan and design all streets as complete streets to address citywide bicycle safety and design for people of all ages and abilities.

<u>Action 2-2A</u>: Implement the citywide low-stress All Ages and Abilities Backbone Network, including protected intersections and/or bicycle signals at major intersections, as outlined in Chapters 4 and 5.

<u>Action 2-2C:</u> Install traffic calming improvements on neighborhood bikeways and increase funding for traffic calming throughout the City.

Goal 3: Use best practices and innovative but tested bicycle designs to implement a continuous, comprehensive low-stress bicycle network to serve all ages and abilities.

Policy 3-1: Plan and design for low traffic stress facilities for bicyclists on the five-year All Ages and Abilities Backbone Network, All Ages and Abilities Vision Network, and new streets.

<u>Action 3-1A:</u> Design bikeways for the "interested but concerned" population of Fremont who tolerate a very low level of traffic stress, such as children, seniors, and those who may be new to biking and do not want to ride in traffic.

<u>Action 3-1B</u>: Ensure that low levels of traffic stress on the All Ages and Abilities Vision Network are maintained at intersections through protected intersections, removed or

modified slip lanes, bicycle signals, turning support, and crossing enhancements on neighborhood bikeways.

<u>Action 3-1C:</u> Provide and maintain signal detection for bicyclists at all intersections, including on side streets and in left-turn pockets.

<u>Action 3-1D</u>: On residential Class III neighborhood bikeways, provide traffic calming to reduce speeds and, where needed, traffic volumes to maintain a low-traffic stress, family-friendly bicycle environment. At neighborhood bikeway crossings with major roadways, provide enhanced crossings to reduce the level of traffic stress at intersections.

Policy 3-2: Coordinate and cooperate across City departments to maximize funding to build out the All Ages and Abilities Backbone and All Ages and Abilities Vision bicycle networks, utilizing dedicated funding streams for bicycling in addition to strategically folding bicycle projects into other typical CIP projects and routine maintenance programs.

<u>Action 3-2A:</u> Continue to work across City departments to routinely identify and integrate bicycle improvements into all standard maintenance (e.g., overlays and repaving), planning studies, roadway redesign, and auto-focused CIP projects (e.g., new signals or signal modifications). Work across City departments to prioritize roadways with existing or proposed bicycle facilities within routine maintenance work and to stripe/restripe meaningful bikeway segments such that they have logical start/end points within the context of the bicycle network, even if this goes beyond the limits of work of routine maintenance projects.

Goal 6: Facilitate coordination and cooperation in the development of the bicycle network.

Policy 6-1: Integrate Fremont's bikeway network with adjacent jurisdictions and Alameda County to ensure regional connectivity.

<u>Activity 6-1A:</u> Establish regular communications and coordinate projects as needed between Union City, Milpitas, Newark, East Bay Regional Park District, BART, AC Transit, Caltrans, and other local agencies regarding bicycle planning issues.

City of Fremont Traffic Impact Study Guidelines

Per the City of Fremont's traffic impact study guidelines, the study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board, 2000. The HCM 2000 methodology defines intersection performance based on a concept called "level of service." Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time.

For unsignalized intersections, level-of-service criteria are divided into two intersection types: all-way stop sign-controlled and side-street only stop sign-controlled. All-way stop-controlled intersection level of service is expressed in terms of the average vehicle delay of all the movements. Side-street only stop sign-controlled intersection level-of-service is defined in terms of the average vehicle delay for an individual approach. Typically, the delay of a side-street-only stop sign-controlled intersection applies to the minor approaches because the major approach does not experience any delay. However, individual movement delay thresholds also apply to movements subject to yield control, like permitted left turns from the major-street approach. **Table 4.3-1** summarizes the level-of-service criteria for unsignalized intersections.

For signalized intersections, level-of-service is measured in terms of the average total vehicle delay of all movements through the intersection. Vehicle delay at a signalized intersection is based variables that include traffic signal phasing, signal cycle length, and traffic volumes with respect to intersection capacity. **Table 4.3-1** also summarizes the level-of-service criteria for signalized intersections.

Level of Service	Description	Signalized Delay	Unsignalized Delay
А	Insignificant	0 to 10 seconds	0 to 10 seconds
В	Minimal	> 10 to 20 seconds	> 10 to 15 seconds
С	Acceptable	> 20 to 35 seconds	> 15 to 25 seconds
D	Tolerable	> 35 to 55 seconds	> 25 to 35 seconds
Е	Significant	> 55 to 80 seconds	> 35 to 50 seconds
F	Excessive	> 80 seconds	> 50 seconds

 TABLE 4.3-1
 INTERSECTION LEVEL OF SERVICE AND DELAY DEFINITIONS

Source: Transportation Resource Board, Highway Capacity Manual, 2000

The City of Fremont's LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized intersections. The City does not have a significance threshold for unsignalized intersections.

Existing Conditions

Setting

The scope of this analysis, the analysis methodology, the existing setting for transportation and circulation issues, and an analysis of future transportation and circulation issues are described below.

Vehicular Access

The following section describes the vehicle, pedestrian, and bicycle facilities, and transit service that provide access to the Project site.

Regional Access Routes

Regional access in the vicinity of the Project site is provided via the following routes:

Interstate 880 (I-880) is a major regional freeway that runs in the north-south direction through Fremont, serving the East Bay and South Bay, and connecting State Route 17 (SR 17) in San Jose to I-980 in Oakland. In the vicinity of the study area it has three mixed-use lanes plus a High Occupancy Vehicle lane in each direction. I-880 provides access to the study via the interchanges at Decoto Road and via Alvarado/Fremont Boulevard.

State Route 84 (SR 84) runs in the east-west direction connecting U.S. 101 on the peninsula and I-880 in Fremont. The roadway has six lanes (three lanes in each direction) and becomes Decoto Road east of I-880. SR 84 provides access to the study area via the interchanges at Ardenwood Boulevard/Newark Boulevard and Paseo Padre Parkway/Thornton Avenue.

Local Access Routes

Local access in the vicinity of the Project site is provided via the roadways discussed below:

Paseo Padre Parkway is a major arterial that extends almost the full length of the City of Fremont, north to south. In the project vicinity, it provides access between Interstate 880 (I-880) and the City of Newark. In the Project vicinity, Paseo Padre Parkway runs in the north-south direction and has two lanes in each direction near the Project; on-street parking is not allowed. The posted speed limit is 45 MPH. After the existing Coyote Hills Regional Park was established, the capacity of Paseo Padre Parkway was increased to its current four-lane configuration.

Commerce Drive runs in the east-west direction between Paseo Padre Parkway and Tupelo Street. Between Paseo Padre Parkway and Ardenwood Boulevard, the posted speed limit is 35 MPH. Between Ardenwood Boulevard and Tupelo Street, the speed limit is 25 mph. Commerce Drive services office uses between Paseo Padre Parkway and Ardenwood Boulevard, and recreational and residential uses between Ardenwood Boulevard and Tupelo Street. It has one through lane and one parking lane in each direction. Parking is restricted between Paseo Padre Parkway and Ardenwood Boulevard.

Patterson Ranch Road is the primary vehicular access to the Park and provides connection to multiple trails that connect at the Park. The road has two lanes and runs east-west within the Project study area.

Ardenwood Boulevard is a four-lane arterial running north-south between Alameda Creek and Fremont City Limits / SR-84. North of Paseo Padre Parkway, Ardenwood Boulevard becomes Union City Boulevard, and is one alternative route to Interstate 880. South of State Route 84 /Fremont City Limits, Ardenwood Boulevard becomes Newark Boulevard. Ardenwood Boulevard has a posted speed limit of 40 mph and runs along a short section of the Park's east boundary.

Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive is a four-legged, unsignalized intersection. Both Patterson Ranch Road and Commerce Drive are subject to minor-approach stop control (east and west legs); Patterson Ranch Road is not subject to traffic control, although traffic is required to yield to pedestrians and bicyclists in the crosswalks. The right turn movements from northbound Paseo Padre Parkway and Commerce Drive provide channelized turn lanes ("pork chops") subject to yield-control to pedestrians and intersecting traffic. There are marked crosswalks at all four legs of the intersection.

Public Transit

Public transportation currently provided in the vicinity of the Project includes bus, train, and paratransit services. Bus service within the community of Fremont and the surrounding cities of Union City, Newark, Hayward, and Milpitas is primarily provided by Alameda Contra Costa Transit District (AC Transit), while rapid rail transit is provided by Bay Area Rapid Transit (BART). Intercity passenger rail service is provided by the Amtrak Capitol Corridor route and Altamont Corridor Express (ACE). Capitol Corridor serves Fremont, Hayward, Oakland, and San Jose, while ACE connects San Jose, Santa Clara, Fremont, and Pleasanton. The public transit in the area is described below.

BART

The BART system constitutes the spine of the regional transit network. BART trains run between Millbrae in the west, Pittsburg in the east, Fremont in the south, and Richmond in the north. Nearby BART stations are located in the City of Fremont and Union City. The Fremont station near Mowry

Avenue and Civic Center Drive, approximately 6 miles from the Project site. The Union City station address is 10 Union Square, 4 miles away. AC Transit provides local bus service from the BART stations in the vicinity of the Project site.

AC Transit

Alameda-Contra Costa County (AC) Transit provides bus transit service to cities in the East Bay. The nearest transit stops to the Project study area are located at the intersection of Ardenwood Boulevard and Commerce Drive, 1500 feet east of Paseo Padre Parkway.

Route SB is a regional commuter route between San Francisco and Fremont. Route SB travels along Ardenwood Boulevard and Union City Boulevard in the vicinity of the Project site. Route SB only operates on weekdays, in the westbound direction between 5:25 a.m. and 9:00 a.m. and in the eastbound direction between 4:00 p.m. and 8:00 p.m. on 30-minute headways.

Route 232 is a local route that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 232 operates between NewPark Mall in the City of Newark and the Fremont BART station; it also stops at the Union City BART station. Route 232 operates with 60-minute headways on weekdays between 5:30 a.m. and 7:30 p.m. and during the weekend between 7:30 a.m. and 7:30 p.m.

Route 621 is a school service route open to the public that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 621 is a single-bus route that starts at the intersection of Ardenwood Boulevard. & Commerce Drive starting every weekday at 7:15 am and ending at Thornton Jr. High School. The returning bus starts at Thornton Jr. High School at 1:00 p.m. on Wednesday and 2:45 p.m. all other weekdays.

East Bay Paratransit

East Bay Paratransit is a service of AC Transit and BART that provides transportation for people who, because of a disability, cannot access, board, or ride public transportation. East Bay Paratransit serves all overlapping AC Transit and BART service areas in Contra Costa and Alameda Counties.

Santa Clara Valley Transportation Authority

Santa Clara Valley Transportation Authority provides connecting service to AC Transit routes that serve the Project site. Santa Clara Valley Transportation Authority operates buses, light rail, and paratransit services for Santa Clara county commuters. A Santa Clara Valley Transportation Authority bus serves the Fremont BART station and provides service to Santa Clara County.

Amtrak

Amtrak provides intercity passenger rail throughout the U.S. In the vicinity of the Project site, Amtrak's Capital Corridor route provides passenger rail service from Oakland, Emeryville, Berkeley, Richmond, and Hayward to Sacramento and points beyond to the east and to San Jose in the south. The San Joaquin route provides service to the San Joaquin and Central Valleys. The Amtrak stations in Fremont and Hayward are near enough to the Project area to allow intermodal access. The Fremont (Centerville) station is located on Fremont Boulevard and is accessible to AC Transit Route U, which goes to the Stanford University campus in Palo Alto. The Fremont station is located at 37260 Fremont Blvd.

Altamont Corridor Express

Altamont Corridor Express (ACE) is a commuter rail service connecting Stockton and San Jose. In the vicinity of the Project site, the ACE rail line provides service from Santa Clara, Emeryville, Berkeley, Richmond, and Hayward to Sacramento and points beyond to the east, and to San Jose in the south. The ACE Fremont station is a shared facility with Amtrak.

Bicycle and Pedestrian Access

There are several bicycle and pedestrian facilities in and near the Project site, most notably the paved section of the San Francisco Bay Trail which runs along the east side of the Project area.

Bikeways

Bicycles are permitted on all roads in Fremont, with the exception of access controlled freeways such as I-880. The 2018 Fremont Bicycle Master Plan designates bicycle facility classifications for Fremont. In the vicinity of the Project area, the existing system consists of three classifications of bicycle facilities:

- Class I facilities (bike paths) are completely separated from roadways, with paved bicycle/pedestrian paths that excludes general motor vehicle traffic;
- Class II facilities (bike lanes) provide a striped and stenciled lane on each side of a street or highway; and
- Class III facilities (bike routes) are a shared use roadway with motor vehicle traffic identified only by signage.

In the Project vicinity, Class II bicycle lanes are provided on Paseo Padre Parkway and Ardenwood Boulevard, in addition to a Class I bike path (Bay Trail) on the west side of Ardenwood Blvd. and Paseo Padre Parkway south of Alameda Creek. On Paseo Padre Parkway, the existing bicycle lanes are a five- to six-foot paved area demarcated by a painted line. There is no additional vertical or horizontal buffer provided between bicycle and vehicle traffic on Paseo Padre Parkway. A Class I bike path (Tuibun Trail) is located parallel to Patterson Ranch Road between Paseo Padre Parkway and the Coyote Hills Regional Park. Another Class I bike path (the Alameda Creek Regional Trail) travels along the south side of Alameda Creek and Crandall Creek (K-line channel), adjacent to the Project area. There are pedestrian crosswalks and walk signals installed at the intersection of Ardenwood Boulevard and Paseo Padre Parkway. There are no marked bikeway facilities on Commerce Drive and Patterson Ranch Road.

Existing Bicycle Conditions

Bicycling to the Park is growing in popularity with the construction of the San Francisco Bay Trail extension.

For bicyclists crossing Paseo Padre Parkway, crosswalks at the intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway are delineated with transverse pavement markings, i.e., two parallel, 12-inch white lines. The crosswalks do not have pedestrian crossing warning signs in advance of the intersection and at the crossing itself. Although not required at all crosswalks by the CA MUTCD, pedestrian crossing warning signs are recommended at high-speed roadways with more than one lane in each direction. Flashing beacons are recommended when justified by pedestrian, bicycle, and vehicle traffic.

Along Paseo Padre Parkway, the northbound bike lane at Patterson Ranch Road/Commerce Drive discontinues approximately 280 feet in advance of the intersection. Where the bike lane is discontinued, there is a 150-foot section where a northbound right turn pocket begins. The unmarked area is the intended weaving⁵⁰ area for northbound vehicles to cross the bikeway to enter the right turn pocket. The bikeway resumes approximately 130 feet from the intersection. The northbound bike lane on Paseo Padre Parkway north of the study intersection runs for approximately

 $^{^{50}}$ Weaving: one movement crossing the path of another along a length of road without the aid or signals or other traffic control devices.

130 feet, and then discontinues again for approximately 140 feet; this unmarked area is the weaving area for westbound right turning vehicles to merge onto northbound Paseo Padre Parkway. In the southbound direction on Paseo Padre Parkway, the bike lanes continue up to the intersection and are demarcated with 200 feet of dashed striping.

The bike lanes on Patterson Ranch are generally designed consistently with California Manual on Uniform Traffic Control Devices (CA MUTCD) guidance on bike lanes and right turn pockets. However, the design lacks both required and optional features that would improve the safety for bicyclists traveling next to high speed traffic (>45 MPH). Among the required elements, the northbound weaving areas lack a required sign, R4-4, "BEGIN RIGHT TURN LANE YIELD TO BIKES". Among the optional elements, there are no dashed lines, signs or markings to indicate to weaving traffic the presence of bicycle traffic. A shorter weaving distance, combined with additional pavement markings, could slow vehicle traffic making the weaving maneuver.

Trails

The San Francisco Bay Trail is a partially completed 500-mile walking and cycling path around the entire San Francisco Bay running through all nine Bay Area counties. In the Project area, the Bay Trail runs along the west side of Ardenwood Boulevard and Paseo Padre Parkway, ending about 400 feet north of Dumbarton Circle. There is a planned route to connect to Alameda Creek Trail and Union City Boulevard on the north side of the Project site. To the south, the Bay Trail connects with the Dumbarton Bridge via on-street bike lanes (Class II bikeways) and Coyote Creek Trail. Pedestrian access into the Park is also provided by the Tuibun Trail, which runs parallel to Patterson Ranch Road between Paseo Padre Parkway and the Visitor Center.

Sidewalks

There are 10-foot sidewalks on the east side of Paseo Padre Parkway and an eight-foot sidewalk on south side of Commerce Drive. Pedestrian access on the west side of Paseo Padre Parkway is provided by the Bay Trail. Pedestrian access along Patterson Ranch Road is provided by the Tuibun Trail.

Existing Pedestrian Conditions

Walking is an increasingly popular way for people to visit Coyote Hills Park. Some park visitors park on Commerce Drive and walk across Paseo Padre Parkway into the park. Employees in the offices east of Paseo Padre Parkway reportedly walk to the Park for recreation throughout the day.

As discussed above, crosswalks at the intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway are delineated with transverse pavement markings, i.e., two parallel, 12inch white lines. The crosswalks do not have pedestrian crossing warning signs in advance of the intersection and at the crossing itself. Although not required at all crosswalks by the CA MUTCD, pedestrian crossing warning signs are recommended at high-speed roadways with more than one lane in each direction. Flashing beacons are recommended when justified by pedestrian and vehicle traffic.

There are curb ramps at all four corners and overhead roadway lights at the northeast and southwest corners. The northeast and southeast corners (Commerce Drive approach) are configured with a channelized right turn lane and a Type C pedestrian passageway. The resulting corner curb radii with the right turn channels are approximately 60 feet. Large corner curb radii typically facilitate fast turns by vehicles. There are no median refuges for pedestrians crossing Paseo Padre Parkway.

Project Site Access

Primary access to the Project is provided via Paseo Padre Parkway with direct vehicular access to Coyote Hills via Patterson Ranch Road.

Existing Parking

There are currently 402 parking spaces, plus 440 overflow spaces and 61 informal spaces at Paseo Padre/Patterson Ranch Road, or a total of903 parking spaces, at Coyote Hills Regional Park. Parking within the park is distributed among several trail staging and parking areas which are located at Willow Run, Chert Flat, the Visitor Center and Cheeyish Valley, as well as a gravel parking area located on the southwest corner of Paseo Padre Parkway and Patterson Ranch Road that developed a pattern of informal staging/parking prior to the parcel being donated to the Park District. **Table 4.3-2** provides an overview of the existing parking supply. Currently, there are a limited number of paved parking spaces in the park, including two ADA accessible spaces, all of which are located at the Visitor Center at the end of Patterson Ranch Road. Paved spaces are desirable because paved/marked spaces result in orderly operations, the least amount of wasted parking space and all weather availability. There are two bicycle racks at the Visitor Center that provide short term parking for ten bicycles.

Parking	Willow	Chert Flat	Dairy	Visitor	Kiosk	Informal	Sub
Area/Surface	Run	and	Glen	Center	Area	Parking	Total
		Cheeyish		(includes 2	Existing	Lot	
		Valley		ADA	Overflow	(Paseo	
		Existing		spaces)	Parking	Padre at	
		Overflow				Patterson	
		Parking				Ranch	
		Area				Road)	
Asphalt				29			29
Gravel	25	120		40		61	246
Mowed Grass	300	160	8		160		628
Sub Total	325	280	8	69	160	61	903
Grand Total	•	•	•	•	•		903

 TABLE 4.3-2
 COYOTE HILLS REGIONAL PARK – EXISTING PARKING SUPPLY⁵¹

Standards of Significance

Transportation and traffic impacts associated with the Proposed Project would be considered significant if the Plan would:

- a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

⁵¹ Coyote Hills Regional Park Land Use Plan, 2005, and parking user counts

- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- e. Result in inadequate emergency access.
- f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Impact Discussion

a. <u>Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for</u> <u>the performance of the circulation system.</u>

Proposed Project

The Coyote Hills Restoration and Public Access Project would restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The proposed Park expansion includes a new entry kiosk, 100-car accessible parking lot, restroom and family picnic facilities, entry area improvements, park signage, approximately four miles of hiking trails, wildlife viewing platforms, and approximately 150 acres of habitat restoration and enhancement lands. The Proposed Project would also reconfigure the main Park entrance and formalize 20 new parking spaces (i.e., pave and mark vehicle parking) that currently occurs in an unpaved area west of Paseo Padre Parkway.

Vehicle Trip Generation

The existing peak hour vehicle trip generation at the park was estimated based on traffic counts of vehicles entering and exiting from Patterson Ranch Road at Paseo Padre Parkway. Traffic counts were collected on a typical weekday, June 23, 2017, and ingress and egress is summarized in **Table 4.3-3**. Traffic counts collected in June 2017, a summer month, were found to be similar to the traffic counts under typical (non-summer) conditions collected on Paseo Padre Parkway for the Ardenwood Technology Park traffic study.⁵² Although the park generates higher traffic on weekends, maximum park impacts on traffic would occur during weekday peak periods, when overall traffic levels are highest. Therefore, the analysis below focuses on weekday peak period impacts on traffic.

Scenario and Approach	AM Pea	k Hour (7	7-9 AM)	PM Pea	k Hour (4-6 PM)
	In	Out	Total	In	Out	Total
Existing Trip Generation	16	7	23	17	22	39
Plus Project Growth (25%)	4	1	5	4	5	9
Existing plus Project Trip Generation	20	8	28	21	27	48

 TABLE 4.3-3
 COYOTE HILLS REGIONAL PARK EXPANSION TRIP GENERATION

The East Bay Regional Park District estimates that the park expansion would result in 25 percent more visitors during weekday AM and PM peak hours.⁵³ The Proposed Project would increase the size of Coyote Hills Regional Park by approximately 25 percent (306 acres added to 1,266 existing acres). The estimated 25 percent Project-generated increase in trips results in 5 AM peak hour trips (.02 trips/acre) and 9 PM peak hour trips (.03 trips/acre) shown in **Table 4.3-3**, above.

Both the existing trip generation and forecast growth are relatively modest compared to the adjacent traffic on Paseo Padre Parkway for several reasons. First, the park is largely unprogrammed open

⁵² W-Trans (2016) Traffic Impact Study for Ardenwood Technology Park.

⁵³ Matt McDonnell, Park Supervisor, Coyote Hills Regional Park, personal communication with Jeff Peters, Owner/Principal, Questa Engineering, Inc., 21 June 2018.

space that would not attract an intensity of users compared to City parks with more active recreation amenities (e.g., recreational fields). Second, open space park trips more typically occur outside the weekday commute peak or on weekends, whereas typical traffic analysis periods are weekday morning (AM) and afternoon (PM) commute peak hours. Although the park's trip generation may be higher outside the typical weekday peak hours, the park's impact at these times on the surrounding transportation network would be less because the transportation network would be experiencing less overall demand.

The Institute of Traffic Engineers (ITE) *Trip Generation, 9th Edition* provides estimates on trip generation for county and state parks (LU 412 and 413, respectively). However, the ITE trip rates were not used, for the following reasons:

ITE trip rates are based on county parks surveyed in 1970s and 2000s in New Jersey, California and North Carolina. Site amenities and programming varied widely: location, boating/swimming, ball fields, soccer fields, campsites, picnic facilities, and general open space. Parks sampled by ITE ranged from less than 100 acres up to 1,200 acres. In the AM peak hour, the ITE average rate is 0.02 trips/acre, and in the PM peak hour, the average rate is 0.09 trips/acre. However, the park trip rates were highest for the smallest (<100 acres) and largest parks (1,150 acres), which had 10-12 AM peak hour trips and 65-75 PM peak hour trips. The park trip rates were lowest for the two mid-size parks (250 and 550 acres); 2-5 AM peak hour trips and approximately 25 PM peak hour trips. Thus, there is no correlation between park acreage and trips generated (i.e., low R-squared value).

The Project-generated trip estimation matches ITE average trips/acre for the AM peak (0.02 trips/acre, or a 5-6 trip increase for the Proposed Project), and is lower than the trips/acre for the PM peak (0.09 trips/acre, or a 27 trip increase for the Proposed Project). However, as discussed above, there is no correlation between park size and ITE trip rates. Therefore, the traffic study's estimate of a 25 percent increase in trips is the best available because it is proportional to Coyote Hill Regional Park expansion size, and the number of trips is within the range of observations collected by ITE. The lower rate estimated for the Proposed Project in the PM peak hour is reasonable because Coyote Hills primarily serves as an open space park, rather than providing more intensively used facilities such as sports fields or campsites.

Existing Plus Project Conditions

The Existing conditions scenario estimates the current vehicle delay at the intersection based on the traffic counts collected during the weekday a.m. and p.m. commute peak periods, which includes the existing vehicle traffic generated by the Coyote Hills Regional Park. The Existing plus Project conditions estimate vehicle operations at the study intersection with the addition of vehicle trips associated with the Proposed Project (**Table 4.3-3**). The Existing and Existing plus Project level of service for the study intersection are summarized in **Table 4.3-4**.

Scenario and Approach	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Existing					
Westbound Commerce Drive	Stop	С	19.8	Е	40.6
Eastbound Patterson Ranch Road	Stop	Ε	35.7	D	26.1
Existing plus Project					
Westbound Commerce Drive	Stop	С	21.1	Ε	40.9
Eastbound Patterson Ranch Road	Stop	Ε	38.8	D	26.2

TABLE 4.3-4EXISTING BASE AND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

As discussed above, the City of Fremont does not have a significance threshold for unsignalized intersections. For purposes of this analysis, the City's threshold of Level of Service D for signalized intersections was applied to the unsignalized intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway. Under Existing conditions, eastbound Patterson Ranch Road operates at a level of service below the LOS "D" threshold during the morning peak hour, while westbound Commerce Drive operates at a deficient LOS during the afternoon peak hour. With the addition of the Project-generated traffic (five total trips in the morning peak hour and nine total trips in the afternoon peak hour), the delay per approach is forecast to increase by approximately three seconds at Patterson Ranch Road, and by less than one second at Commerce Drive. Under Existing and Existing plus Project conditions, the vehicles along Paseo Padre Parkway do not experience delay except when yielding to oncoming traffic when making a left turn.

Actual delays may be higher than those calculated by the Highway Capacity Manual. Vehicles turning left onto Paseo Padre Parkway from the minor street approaches must find gaps in two directions of traffic. This maneuver is particularly challenging when the intersecting traffic is traveling at high speed, since minor street vehicles need a larger time and space gap (compared to intersecting traffic at lower speeds) to clear the intersection and accelerate to the prevailing traffic speed. Vehicle traffic on Paseo Padre Parkway has been observed traveling above the posted speed limit of 45 MPH. Vehicles unable to find a left-turning gap from the Patterson Ranch Road approach could turn right onto southbound Paseo Padre Parkway. The first opportunity to turn off Paseo Padre Parkway is at Kaiser Drive, a half mile to the south.

Near-Term Base Plus Project Conditions

Future year vehicle traffic forecasts were derived from traffic forecasts reflecting the City of Fremont's General Plan build-out (2035).⁵⁴ The General Plan Traffic Impact Analysis's nearest direct traffic forecasts were for the Paseo Padre Parkway/Ardenwood Boulevard intersection. The traffic at the Project study intersection was forecast using the arriving and departing traffic volumes along Paseo Padre Parkway and continuing these trips through the Patterson Ranch Road/Commerce Drive intersection.

Near-Term Base traffic forecasts were modeled by interpolation between the traffic count year (2017) and the build-out (2035) and applying eight years' growth to estimate year 2025 conditions (Figure 4). The Near-Term conditions are assumed to reflect the following projects in the Project area that are either under construction or already entitled:

- Four office buildings on Campus Court entitled through the Ardenwood Technology Park Planned District Amendment
- 500 single-family residential lots and associated parks, trails, streets and utilities under construction on the Patterson Ranch Planned District Project site
- The planned District Amendment for the Dumbarton Quarry Regional Recreation Area

The Near-Term plus Project conditions added the Proposed Project traffic to the Near-Term Base forecasts. The Near-Term and Near-Term plus Project level of service are summarized in **Table 4.3-5**.

⁵⁴ https://www.fremont.gov/DocumentCenter/View/5813/Appendix-B-web-version?bidId; Appendix C.

Scenario and Approach	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Near-Term Base					
Westbound Commerce Drive	Stop	D	29.0	F	56.7
Eastbound Patterson Ranch Road	Stop	F	57.7	Ε	41.2
Near-Term plus Project					
Westbound Commerce Drive	Stop	D	31.3	F	57.3
Eastbound Patterson Ranch Road	Stop	F	64.6	E	42.1

 TABLE 4.3-5
 NEAR-TERM BASE AND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Under Near-Term Base conditions and Near-Term plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS E or F during the commute peak hours due to increased through-traffic on Paseo Padre Parkway. With the Proposed Project, the forecast delay at the Patterson Ranch Road approach would increase by up to seven seconds between Near-Term Base and plus Project conditions.

Cumulative Base Plus Project Conditions

For the Proposed Project, Cumulative Base traffic forecasts for Paseo Padre Parkway were derived from adjacent forecasts at the Paseo Padre Parkway/Ardenwood Boulevard intersection.⁵⁵ The Cumulative Base plus Project conditions added the Proposed Project traffic to the Cumulative Base conditions. The Cumulative Base and Cumulative plus Project level of service for the study intersection are summarized in **Table 4.3-6**.

TABLE 4.3-6	CUMULATIVE BASE AND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF
	Service

Scenario and Approach	Control	A.M. Peal	A.M. Peak Hour		P.M. Peak Hour	
Scenario and Approach	Control	LOS	Delay	LOS	Delay	
Cumulative						
Westbound Commerce Drive	Stop	F	54.7	F	101.5	
Eastbound Patterson Ranch Road	Stop	F	124.3	F	97.3	
Cumulative plus Project						
Westbound Commerce Drive	Stop	F	61.0	F	102.9	
Eastbound Patterson Ranch Road	Stop	F	149.7	F	105.3	

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. The forecast delay resulting from the Proposed Project at the Patterson Ranch Road approach would increase by up to 25 seconds between Cumulative Base and plus Project conditions.

It is expected that the existing Ohlone overflow parking area near the current Kiosk would seldom be used with construction of the new parking facilities. It is currently used mainly during the

⁵⁵ W-Trans (2016) *Traffic Impact Study for Ardenwood Technology Park*. Figure 11 – Cumulative plus Project Traffic Volumes.

gathering of the Ohlone Peoples and other special event days such as the annual Bird and Butterfly Festival and on Easter Sunday, weather and ground conditions permitting.

With recent construction of the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, adjacent to the Park, along with proposed entry modifications and the provision of new internal trails and trail connections, it is likely that the number of visitors entering Coyote Hills Regional Park would be dispersed, with many more visitors arriving by foot or bicycle. These visitors would have the opportunity to explore the 4.5 miles of new and re-constructed trails that are located much closer to the entry area than the existing trail network located nearer to the Visitor Center.

Impact of the Proposed Project on LOS

The Patterson Ranch and Commerce Drive approaches at the study intersection are estimated to operate at a deficient LOS, beginning under Existing conditions (LOS "E"), and getting progressively worse with vehicle traffic growth through year 2035 (LOS "F"). Although the delays forecast under Cumulative plus Project conditions at Patterson Ranch Road appear to be extreme, they affect a relatively small number of vehicles (approximately 30 in the peak hour) compared to the through-traffic on Paseo Padre Parkway (approximately 1,500 in the peak hour). Under Cumulative plus Project conditions, the Project would account for less than one percent of AM peak hour traffic growth (0.7% = 5 / (2060-1329)) and slightly more than one percent (1.3% = 9 / (2521-1816)) of PM peak hour volume growth, or one percent on average.

The Project would add bicycle and pedestrian traffic to the study intersection. Future peak hour bicycle and pedestrian volumes were not forecast because demand is uncertain during the weekday commute peak hour. The Project impact on bicycle and pedestrian traffic is estimated at the percent vehicle traffic impact, or one percent of the projected growth through General Plan build-out.

The City of Fremont's LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized intersections. As discussed above, the City of Fremont does not have a significance threshold for unsignalized intersections. For purposes of this analysis, the City's threshold of Level of Service D for signalized intersections was applied to the unsignalized intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway. The Project would have a *potentially significant* impact because traffic generated by the Project would add vehicle traffic to an intersection operating below the threshold for acceptable operations.

Impact TRANSP-1: The Proposed Project would result in an increase in traffic delays at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection. This effect on Level of Service (LOS) represents a *potentially significant* impact.

<u>Mitigation Measure TRANSP-1</u>: To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City of Fremont should institute "Right Turn Only" from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping, and raised curbs may be needed to reinforce the right-turn only requirement. The Park District shall contribute its fair share (one percent) toward the cost of the improvements.

Significance after Mitigation: Contribution of the Proposed Project's fair share (one percent) of the "Right Turn Only" improvement would improve traffic delays at the Patterson Ranch Road approach to Level of Service C in the AM peak period, and

Level of Service B in the PM peak period. This would reduce the Project's impact to a *less than significant* level.

Impact TRANSP-2: The Proposed Project would increase use of the pedestrian and bicyclist crosswalk at Paseo Padre Parkway, which is not signalized. This represents a *potentially significant* impact.

<u>Mitigation Measure TRANSP-2</u>: The Proposed Project shall contribute a fair share (one percent) of the cost of future intersection modifications to improve pedestrian and bicycle access across Paseo Padre Parkway, at or before the time the City of Fremont implements intersection modifications. These intersection improvements may consist of:

- Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet.
- Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles.
- Shorten the northbound right turn weaving area to slow vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone.
- Install additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks.
- Upgrade the crosswalks from transverse markings (two white lines) to continental markings.
- Add yield lines 30 feet in advance of the crosswalks.
- Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway.
- The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future.

Significance after Mitigation: Contribution of the Proposed Project's fair share (one percent) of the pedestrian and bicycle improvements above would reduce the Project's impact to a *less than significant* level.

Signal Warrant Analysis

The California Manual on Uniform Traffic Control Devices (CA MUTCD) provides guidance on when conditions justify traffic signals. These studies, or "signal warrants", consider the "traffic conditions, pedestrian characteristics, and physical characteristics of the location... to determine whether installation of a traffic control signal is justified at a particular location" (§4C.01).

An analysis for applicable traffic signal warrants and pedestrian beacon warrant for the Proposed Project found that none of the applicable traffic control signal warrants (1, 2, 3, and 4) were met, meaning traffic control signals are not warranted at the Commerce Drive/Paseo Padre Parkway/ Patterson Ranch Road intersection. However, the pedestrian hybrid beacon warrant in the CA MUTCD was met using counts observed from Saturday, June 24, 2017. Thus, a pedestrian hybrid beacon may be warranted at this intersection (see Mitigation Measure TRANSP-2, above), and if considered, should conform to all standards and guidance provided in Chapter 4F of the CA MUTCD.

Project Impacts Based on Vehicle Miles Traveled

California Senate Bill 743 changed the State's criteria on transportation-related environmental impacts from a Level-of-Service basis to Vehicle Miles Traveled (VMT). Regulations implementing this change, including changes to the CEQA Guidelines pertaining to evaluation of transportation impacts, had been proposed but were not yet in effect at the time this EIR was prepared. The discussion of VMT below is presented for informational purposes.

VMT measures the amount of trips and distance people drive to a destination. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options.

The Governor's Office of Planning and Research (OPR) issued a technical advisory on how to apply VMT analysis.⁵⁶ The technical advisory does not specifically suggest a VMT threshold for parks, with most of the discussion oriented around residential, office and retail projects. The most relevant guidance from the technical advisory is for small projects:

Screening Threshold for Small Projects Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

The Proposed Project is estimated to 70 additional daily trips (based on 14 combined AM and PM peak hour trips, and extrapolated by a factor of five), which indicates a less-than-significant transportation impact per the Small Projects Screening Threshold.

The OPR guidance on retail uses is also applicable to the Proposed Project: Parks, like retail uses, typically redistribute recreation trips rather than creating new trips. By adding recreational opportunities into the urban fabric and thereby improving recreational destination proximity, local parks tend to shorten trips and reduce VMT. The Proposed Project would provide and improve upon a connection to a regional multiuse trail, which would allow for non-vehicular access.

For these reasons, the Proposed Project is not likely to cause a significant impact based on VMT.

b. <u>Conflict with an applicable congestion management program, including, but not limited to</u> <u>level of service standards and travel demand measures, or other standards established by the</u> <u>county congestion management agency for designated roads or highways.</u>

The Project would provide off-street parking spaces, bicycle and pedestrian facilities, connections to existing trails, and transit-supportive facilities that are consistent with City of Fremont policies and programs. As discussed in Section a, above, implementation of the Project would incrementally increase vehicle traffic that would worsen the Level of Service (LOS) at the intersection of Paseo Padre Parkway Patterson Ranch Road/Commerce Drive.

⁵⁶ State of California, Governor's Office of Planning and Research. (April 2018) "Technical Advisory on Evaluating Transportation Impacts in CEQA." http://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf

Impact TRANSP-3: Vehicle traffic generated by the Proposed Project could worsen the Level of Service at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-3: Implement Mitigation Measure TRANSP-1.

Significance after Mitigation: With the implementation of Mitigation Measure TRANSP-1, the impact of the Proposed Project on Level of Service at Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive would be reduced to a *less than significant* level.

c. <u>Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.</u>

No impacts to air traffic are anticipated as a result of this Project. There would be *no impact*.

d. <u>Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</u>

Collision data from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) from 2007 to 2017 show seven collisions at the Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive intersection over the past 11 years. Five collisions involved multiple vehicles, one collision involved a vehicle and bicyclist, and one involved one vehicle hitting a fixed object. Of the seven total collisions, five collisions were broadside collisions. All five collisions occurred between one vehicle on Paseo Padre Parkway and another attempting to turn onto or cross Paseo Padre Parkway from the minor street approaches. The single-vehicle collision was attributed to improper turning resulting in hitting a fixed object.

The bicycle collision occurred when a bicyclist crossing Paseo Padre Parkway was hit by a southbound vehicle on Paseo Padre Parkway. There are no recorded pedestrian collisions at the Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway intersection.

Since Coyote Hills Regional Park first opened nearly 50 years ago, the City of Fremont has redesigned Paseo Padre Road to a high-speed parkway with an unsignalized intersection at the park entry. Vehicle speeds and higher traffic volume from the buildout of the City over the past 50 years have affected safety of access to the Park. Growth in the City, especially office uses on the opposite side of Paseo Padre Parkway from the Park, has substantially increased use of this intersection crossing by pedestrians and bicyclists accessing the Park. Implementation of the Project would not create any transportation hazards due to a design feature. However, the Project would add vehicle, bicycle, and pedestrian traffic to an intersection with existing deficiencies that affect transportation safety.

Impact TRANSP-4: Bicycle and pedestrian traffic generated by the Proposed Project could increase transportation hazards at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-4: Implement Mitigation Measure TRANSP-2.

Significance after Mitigation: With the implementation of Mitigation Measure TRANSP-2, the impact of the Proposed Project on transportation hazards would be reduced to a *less than significant* level.

e. Result in inadequate emergency access.

No substantial impacts to emergency access are anticipated. The Project would not create new barriers to emergency vehicles. The Project would provide additional site access with new bicycle and pedestrian facilities that can be utilized by emergency vehicles. Emergency access on existing streets within and adjacent to the site would not be affected. There would be *no impact*.

f. <u>Conflict with adopted policies</u>, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The Project would provide additional bicycle and pedestrian facilities, connections to existing trails, and would implement a portion of the Fremont *All Ages and Abilities Vision Network* identified in the General Plan and Fremont Bicycle Plan. However, additional bicycle and pedestrian traffic generate by the Proposed Project could adversely affect safety of the bicycle and pedestrian crossing of Paseo Padre Parkway.

Impact TRANSP-5: Bicycle and pedestrian traffic generated by the Proposed Project could worsen the bicycle and pedestrian safety at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-5: Implement Mitigation Measure TRANSP-2.

Significance after Mitigation: With the implementation of Mitigation Measure TRANSP-2, the impact of the Proposed Project on bicycle and pedestrian safety at Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive would be reduced to a *less than significant* level.

Cumulative Analysis

The following projects in the vicinity of the Proposed Project site were proposed, approved, or under construction at the time this EIR was prepared.

Proposed Projects

Four office buildings on Campus Court. These buildings were entitled through the Ardenwood Technology Park Planned District Amendment.⁵⁷ They would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure would have a maximum of 8,700 square feet, and the Project will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open

⁵⁷ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

views of the nearby marsh. Planning and conceptual design for the new Visitor Center are currently underway.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was prepared. This work involves grading two, 2- to 3-foot-deep off-channel basins that will be connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District Project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under final phases of construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This project involves development of the former Dumbarton rock quarry, located south of the Project site, into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard. This project is under construction, and is expected to open in late 2019.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.⁵⁸ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

⁵⁸ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

Cumulative Impacts of the Proposed Project

As discussed under Near-Term Base Plus Project Conditions and Cumulative Base Plus Project Conditions, above, the transportation report included future year vehicle traffic forecasts reflecting the City of Fremont's General Plan build-out (2035). The transportation report's forecasting methodology differs from the cumulative projects list-based approach above; however, the transportation report's forecasting methodology is consistent with, and includes, the cumulative projects listed above.

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. Growth in vehicle traffic due to past, current and probable future projects in the Project vicinity would result in a *potentially significant* cumulative impact. The forecast delay resulting from the Proposed Project at the Patterson Ranch Road approach would increase by up to 25 seconds between Cumulative Base and plus Project conditions. With implementation of Mitigation Measures TRANSP-1 and TRANSP -2, above, the Proposed Project would not make a cumulatively considerable contribution to transportation and traffic. Therefore, the cumulative impact of the Proposed Project on transportation would be *less than significant*.

5 ALTERNATIVES

According to the CEQA Guidelines Section 15126.6:

An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

A No Project Alternative is required as one of the "reasonable range of alternatives" that could feasibly attain most or all of the Project's objectives. Besides the No Project Alternative, three other alternatives, called the: 1) Restore Contractors Residence in Place Alternative, 2) Relocate and Restore Contractors Residence Alternative, and 3) Hand Disassemble, Relocate, and Restore Contractors Residence Alternative are analyzed. Each alternative is analyzed against the Project Objectives presented and significance thresholds considered in Chapter 4 and the impacts compared to those of the Proposed Project.

The Project Objectives (Chapter 3) include:

- Ensuring integration of the Expansion area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area.
- Protecting and/or enhancing cultural resources, including providing compatible recreational and interpretive opportunities.
- Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.
- Providing for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resource areas.
- Removing the Contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.
- Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.
- Providing opportunities for urban agriculture.
- Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.
- Developing and managing the Expansion area to be adaptable and sustainable, with awareness of a changing climate that may affect habitat and public access.
- Designing improvements for low maintenance, high durability and to reduce park operating cost, where feasible.
- Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.

Table 5-1 shows how the Proposed Project and the alternatives are in accordance, or not, with the Project objectives. Comparative impacts for the No Project Alternative, Restore Contractors

Residence in Place Alternative, Relocate and Restore Contractors Residence Alternative, and Hand Disassemble, Relocate, and Restore Contractors Residence Alternative are summarized in **Table 5-2**.

The environmentally superior alternative is then identified. At the conclusion of this chapter, there is an account of alternatives considered earlier in the planning process but rejected because they were infeasible, failed to achieve most of the Project objectives, or did not reduce the Proposed Project's significant impacts.

		Proposed	No Project	Restore Contractors Residence in Place	Relocate and Restore Contractors Residence	Hand Disassemble, Relocate, and Restore Contractors Residence
#	Objective	Project	Alternative	Alternative	Alternative	Alternative
1	Integration of Expansion Area with existing Regional Park facilities, uses and resources, and resources of the greater Coyote Hills area.	Yes	No	Yes	Yes	Yes
2	Protecting and/or enhancing cultural resources, including providing recreational and interpretive opportunities.	Yes	No	No	No	Yes
3	Protecting and/or enhancing biological resources while providing recreational, and interpretive opportunities.	Yes	No	Yes	Yes	Yes
4	Provide for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resources.	Yes	No	No	Yes	Yes
5	Remove the contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.	Yes	No	No	No	No
6	Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.	Yes	No	Yes	Yes	Yes
7	Providing opportunities for urban agriculture.	Yes	Yes	Yes	Yes	Yes

TABLE 5-1COMPARISON OF ALTERNATIVES TO PROJECT OBJECTIVES

#	Objective	Proposed Project	No Project Alternative	Restore Contractors Residence in Place Alternative	Relocate and Restore Contractors Residence Alternative	Hand Disassemble Relocate, an Restore Contractors Residence Alternative
8	Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.	Yes	No	Yes	Yes	Yes
9	Developing and managing the Expansion Area to be adaptable, with awareness of a changing climate that may affect area resources.	Yes	No	Yes	Yes	Yes
10	Design improvements for low maintenance, high durability and to reduce park operating cost, where feasible.	Yes	No	No	No	No
11	Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.	Yes	No	Yes	Yes	Yes

IAD	LE 5-2 IMPACIS OF PRO	JECI ALIEKNAI	IVES COMPARED TO PE	KUPUSED F KUJEL I	Hand
	Proposed Project – Maximum Impact	No Project Alternative – Impact Comparison	Restore Contractors Residence in Place Alternative – Impact Comparison	Relocate and Restore Contractors Residence Alternative – Impact Comparison	Disassemble, Disassemble, Relocate, and Restore Contractors Residence Alternative – Impact Comparison
Aesthetics	LTS	—	=	_	_
Agriculture and Forest Resources	LTS	+	=	=	=
Air Quality	LTS with Mitigation	+	_	_	_
Biological Resources	LTS with Mitigation	-	-	_	=
Cultural Resources (historic architectural)	Significant and Unavoidable	+	+	+	+
Cultural Resources (Native American archaeological)	LTS with Mitigation	+	-	_	=
Geology and Soils	LTS with Mitigation	+	_	_	_
Greenhouse Gas Emissions	LTS	+	_	_	_
Hazards and Hazardous Materials	LTS with Mitigation	+	_	_	_
Hydrology and Water Quality	LTS with Mitigation	+	_	_	_
Land Use and Planning	LTS	_	=	=	+
Mineral Resources	LTS	+	=	=	=
Noise	LTS with Mitigation	+	_	_	_
Population and Housing	LTS	+	=	=	=
Public Services	LTS	+	=	=	=
Recreation	LTS	=	=	=	=
Transportation/ Traffic	LTS	+	=	=	=
Tribal Cultural Resources	LTS with Mitigation	+	_	_	=
Utilities and Service Systems	LTS with Mitigation	+	=	=	=

TABLE 5-2 IMPACTS OF PROJECT ALTERNATIVES COMPARED TO PROPOSED PROJECT

LTS = Less than significant

L1S = Less than significant SU = Significant and Unavoidable - impact increased, or less beneficial, compared to Proposed Project/deterioration + impact decreased compared to Proposed Project/improvement = equivalent impact compared to Proposed Project Source: Questa Engineering, 2109.

5.1 No Project Alternative

Principal Characteristics

Under the No Project Alternative, the site would remain in its existing condition. There would be no visitor serving facilities or trails constructed that would allow public access and use of the site. No habitat restoration, enhancement, and wildlife management, or vegetation and pest management would occur. The existing archaeological resources and human remains on the site would not be disturbed. The existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition, and would be subject to deterioration as time passes. No utility upgrades and extensions, or climate change and sea level rise adaptation, would occur on the site.

Impact Analysis

Aesthetics

The Project site would look the same as present and there would be no aesthetic change. There would be no habitat or wetland restoration and enhancement, or vegetation and pest management. No trails or wildlife observation platforms would be constructed. Because the Proposed Project would have an overall beneficial aesthetic impact on the site, the No Project Alternative, while having no impacts, would be *worse than* the Proposed Project for Aesthetics.

Agriculture and Forest Resources

The Proposed Project would have little or no impact on agriculture and forest resources. The No Project Alternative would have no effect on agriculture and forest resources. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Agriculture and Forest Resources.

Air Quality

Without the program of habitat and wetland restoration and new construction of trails and visitor serving facilities, there would be no emissions from construction. In addition, there would be no change in visitors from current levels. By definition, there would be *reduced* air quality impacts compared to the Proposed Project.

Biological Resources

The Proposed Project would restore and enhance the 121-acre Patterson Slough Natural Unit and enhance and expand seasonal wetlands in the 29-acre Western Wetlands natural Unit. In contrast, the No Project Alternative would not create or enhance any habitat.

In the absence of the grading for Project construction, enhanced wetlands, and Patterson Slough restoration that is required for the Proposed Project, there would be no short-term, construction-related impacts to wildlife species, jurisdictional waters, or sensitive communities. However, invasive, non-native plant species would not be removed, the Project site would not be restored with native vegetation, and additional seasonal wetlands would not be created or enhanced. There would not be an increase in wildlife habitat, as would occur under the Proposed Project.

The No Project Alternative would not produce the biological benefits provided by the Proposed Project, as the existing seasonal wetlands would be of smaller size and lower quality for wildlife than the Proposed Project, and would provide less hydrologic function in remediating stormwater runoff. Overall, although the No Project Alternative would not have biological impacts, it would be *less beneficial* than the Proposed Project for Biological Resources.

Cultural Resources

With no site grading, no utility upgrades or extensions, no new visitor serving facilities, and no public access improvements, there would be no potential impacts to the known archaeological cultural resources at the site, or areas of presently unknown and buried resources. The potential impacts on archaeological cultural resources of the Proposed Project would be reduced to a less-that-significant level by mitigation measures identified in this EIR. Although the existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition, and would be subject to deterioration as time passes, the Contractors Residence would not be disassembled. Therefore, the impacts of the No Project Alternative would be *less* than the Proposed Project and the No Project Alternative would be *better* for Cultural Resources.

Geology and Soils

The No Project Alternative would not result in construction of visitor serving facilities on a Project site that contains expansive soils and is subject to seismic shaking. With appropriate construction practices, facilities could be built to standards that could withstand the likely strong ground shaking, liquefaction, and other effects of a major earthquake. If the public access facilities were not built, and if the Proposed Project – which would bring additional visitors into this area – did not take place, the risks of injury from such an earthquake and accompanying strong ground shaking would be *reduced*. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Without construction equipment, activity associated with grading and site improvements, and with fewer site visitors, there would be lower greenhouse gas (GHG) emissions for the No Project Alternative. However, to the extent that the Proposed Project improvements encourage use of the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway for bicycle and pedestrian travel, instead of by automobile, there would be a net reduction in vehicle trips under the Proposed Project, which would benefit air quality. Overall, the No Project Alternative would therefore have *less* potential impact for GHG emissions compared to the Proposed Project and would be *better* than the Proposed Project for GHG emissions.

Hazards and Hazardous Materials

The No Project Alternative would not involve the use of construction equipment and materials, and therefore the risk of accidental spills of fuels, lubricants, etc. would not occur, and impacts associated with construction, and operation, would not take place. Therefore, the No Project Alternative would have *less* potential impact than the Proposed Project for Hazards and Hazardous Materials.

Hydrology and Water Quality

Without the construction of the visitor serving facilities, habitat and wetland enhancement, and public access components, there is less possibility of soil erosion and sedimentation causing turbidity in the Bay, and in this respect, the No Project Alternative would result in reduced short-term impacts compared to the Proposed Project. However, with mitigation measures identified in the Initial Study, these impacts would be reduced to a less-than-significant level. Therefore, the No Project Alternative would have *similar* impacts to the Proposed Project for Hydrology and Water Quality.

Land Use and Planning

No significant land use impacts would result from the Proposed Project from division of an established community or conflicts in land uses. As the No Project would have no effect on established communities or conflicts in land uses, there would be little difference between the Proposed Project and the No Project Alternative.

The No Project Alternative would not improve the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, or increase public access to Coyote Hills Regional Park. Therefore, the No Project Alternative would therefore have *greater* impacts than the Proposed Project for Land Use and Planning.

Mineral Resources

The Proposed Project would have little impact on mineral resources, while the No Project Alternative would have no effect on mineral resources. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Mineral Resources.

Noise

Without the construction phase of the Project, there would be less temporary noise disturbance to the neighbors of the Project site, and visitors to Coyote Hills Regional Park. Ambient noise exposure would remain the same. Compared to the Proposed Project, the No Project Alternative would attract fewer visitors to the area and generate less vehicular noise. The No Project Alternative would have *lesser* impacts and be *better* than the Proposed Project for Noise.

Population and Housing

The Proposed Project would have little impact on population and housing, while the No Project Alternative would have no effect on population and housing. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Population and Housing.

Public Services

The Proposed Project would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The No Project Alternative would avoid this slight increase, and thus would have a slightly *less* impact than the Proposed Project on public services.

Recreation

The No Project Alternative would not result in an increase in visitors to Coyote Hills Regional Park and future users of the improved Bay Trail system. However, there would not be public access improvements or expansion of recreational facilities as with the Proposed Project. The Proposed Project would result in less-than-significant impacts to recreational facilities and therefore the No Project Alternative would be *similar* to the Proposed Project with *equivalent* impacts for Recreation.

Transportation / Traffic

The additional pedestrian and bicycle use, and passenger vehicles on local streets as a consequence of the Proposed Project, would contribute negligible additions compared to the existing conditions of local streets at times of maximum park use. Under the No Project Alternative, there would be no change to the existing level of traffic safety concerns at the Project site or emergency access, and there would be no conflicts with transit policies. With the No Project Alternative, there would be fewer park users and fewer vehicle trips to the Project site. Thus, the No Project Alternative would have slightly *less* impact than the Proposed Project in terms of Transportation/Traffic impacts.

Tribal Cultural Resources

Although the potential impacts of the Proposed Project to Tribal Cultural Resources would be reduced to a less than significant level by the mitigation measure identified in this EIR, this Alternative would avoid these impacts, and therefore would have *lesser* impacts than the Proposed Project in terms of Tribal Cultural Resources.

Utilities and Service Systems

The No Project Alternative would not result in the use of water or other utilities. The Proposed Project would use small amounts of irrigation water for restoration planting and the new restroom, and generate small amounts of wastewater from the restroom. The Proposed Project would result in less-than-significant impacts to utilities and service systems. Because the No Project Alternative would have no impact on water and other utilities, its impact on Utilities and Service Systems would be slightly *less* than the Proposed Project.

Comparison to Project Objectives

As summarized in **Table 5-1**, the No Project Alternative would fail to meet all of the Project objectives, including the objectives of integrating the Project site into the existing Regional Park, enhancing wetlands and habitats, and providing opportunities for recreation. There would be no opportunities for Climate Smart education, or improvement of the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway.

5.2 Restore Contractors Residence in Place Alternative

Principal Characteristics

The Restore Contractors Residence in Place Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would remain in its current location, and be restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitating* (1995). To properly stabilize the Contractors Residence for restoration, the building's foundation would require repair and reconstruction. This would involve mobilization of heavy equipment in the vicinity of the structure in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six to eight month period.

Aesthetics

The Restore Contractors Residence in Place Alternative would look slightly different from the Proposed Project in that it would include a restored Contractors Residence in its present location, rather than disassembling the structure and returning the building site to a more natural appearance. In other respects, the Restore Contractors Residence in Place Alternative would have similar aesthetic impacts as the Proposed Project. Because the restoration of the Contractors Residence in place under the Restore Contractors Residence in Place Alternative would affect only a small portion of the 306-acre Project site, and this difference would be very similar to existing aesthetic conditions, this alternative would have aesthetic impacts *similar* to the Proposed Project.

Agriculture and Forest Resources

Similar to the Proposed Project, the Restore Contractors Residence in Place Alternative would have little or no impact on agriculture and forest resources. Therefore, the Restore Contractors Residence in Place Alternative would have impacts *similar* to the Proposed Project for Agriculture and Forest Resources.

Air Quality

The area graded and disturbed for wetland and habitat enhancement would be the same for the Restore Contractors Residence in Place Alternative as the Proposed Project; however, there would be somewhat more use of heavy construction equipment because of the need for repair and reconstruction of the foundation of the Contractors Residence, as well as subsequent restoration. Air emissions would be greater than the Proposed Project, and the Restore Contractors Residence in Place Alternative would be *worse* for Air Quality.

Biological Resources

The Restore Contractors Residence in Place Alternative would create or enhance seasonal wetlands and upland habitat, but there would be slightly less habitat created under this alternative because the Contractors Residence would not be removed. The Contractors Residence is located in the most sensitive and biologically important part of the Project area, adjacent to Patterson Slough. Furthermore, foundation repair including mobilization of heavy equipment could damage sensitive biological resources in the Patterson Slough Natural Unit near the Contractors Residence. Overall, the Restore Contractors Residence in Place Alternative would be *less beneficial* than the Proposed Project for Biological Resources.

Cultural Resources

The Restore Contractors Residence in Place Alternative would avoid the significant unavoidable impact on historic architectural resources of the Proposed Project. However, to properly stabilize the Contractors house for restoration, the building's foundation would need repair and reconstruction. This would involve mobilization of heavy equipment over the building site and vicinity in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six- to eight-month period. Because of relatively high groundwater conditions in this area and the location of the house on un-compacted and uncontrolled local soil fill materials, the soils are expected to be soft and compressible under equipment and traffic loading. Under these conditions, it is expected that there would be considerable damage to the underlying sub-surface archaeological resources, which may include Native American human remains. This would create a significant unavoidable impact on cultural resources, but create a significant unavoidable impact on historic architectural resources, but create a significant unavoidable impact on archaeological resources including Native American human remains. Therefore, the Restore Contractors Residence in Place Alternative and the Proposed Project would both have significant unavoidable impacts on cultural resources, and in this sense would be equivalent for Cultural Resources.

Geology and Soils

Like the Proposed Project, the Restore Contractors Residence in Place Alternative would include wetland and habitat restoration and enhancement, and visitor serving facilities and trail construction. There would be more excavation associated with repair of the Contractors Residence foundation under this alternative, with increased risk of erosion. Therefore, impacts would be *greater*, and the Restore Contractors Residence in Place Alternative would be *worse* to the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Operation of the Restore Contractors Residence in Place Alternative would generate greenhouse gas emissions similar to the Proposed Project. The use of heavy construction equipment for restoration of the Contractors Residence would be higher for the Restore Contractors Residence in Place Alternative as compared to the Proposed Project, in which the building would be disassembled with hand equipment. Impacts of construction would be *greater* than the Proposed Project, and the Restore Contractors Residence in Place Alternative as Place Alternative would be *worse* for GHG emissions.

Hazards and Hazardous Materials

Under the Restore Contractors Residence in Place Alternative, there would be some increased risk of accidental spills of heavy equipment diesel and hydraulic fluids associated with greater use of heavy equipment for repair and restoration of the Contractors Residence and its foundation. Overall, the risks are considered greater for the Restore Contractors Residence in Place Alternative than the Proposed Project, and impacts would be *worse* for Hazards and Hazardous Materials.

Hydrology and Water Quality

The Restore Contractors Residence in Place Alternative would involve more heavy equipment use and excavation for repair and reconstruction of the foundation of the Contractors Residence. The Restore Contractors Residence in Place Alternative would consequently have more risk of erosion. Therefore, the Restore Contractors Residence in Place Alternative would be *worse* than the Proposed Project for hydrology and water quality impacts.

Land Use and Planning

Overall, impacts from the Restore Contractors Residence in Place Alternative on established communities and conflicts in land uses would be similar to those of the Proposed Project. The Restore Contractors Residence in Place Alternative would have less conflict with plans and policies that call for preservation of historic buildings; however, it would have more conflict with plans and policies that call for preservation of archaeological resources. In this sense the Restore Contractors Residence in Place Alternative would be *equivalent* to the Proposed Project for Land Use and Planning.

Mineral Resources

Similar to the Proposed Project, the Restore Contractors Residence in Place Alternative would have little impact on mineral resources. Therefore, the Restore Contractors Residence in Place Alternative would have impacts *similar* to the Proposed Project for Mineral Resources.

Noise

Noise impacts during the construction phases of the Restore Contractors Residence in Place Alternative would be greater than the Proposed Project, as there would be more heavy equipment use during restoration of the Contractors Residence and its foundation. Compared to the Proposed Project, the Restore Contractors Residence in Place Alternative would have a similar number of Park visitors who would be exposed to existing ambient noise conditions. Overall, the Restore Contractors Residence in Place Alternative would have greater noise impacts and be *worse* than the Proposed Project.

Population and Housing

Similar to the Proposed Project, the Restore Contractors Residence in Place Alternative would have little impact on population and housing. Therefore, the Restore Contractors Residence in Place Alternative would have impacts *similar* to the Proposed Project for Population and Housing.

Public Services

Both the Proposed Project and the Restore Contractors Residence in Place Alternative would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The Restore Contractors Residence in Place Alternative would be *equivalent* in impacts on public services to the Proposed Project.

Recreation

The Restore Contractors Residence in Place Alternative would similar area and facilities available for recreation use. Potential impacts would be *equivalent to* the Proposed Project for Recreation.

Transportation / Traffic

Since the public access improvements and recreational facilities constructed for the Restore Contractors Residence in Place Alternative would be similar to the Proposed Project, the number of additional visitors also would be similar, due to similarly increased recreational opportunities. The level of additional bicycles and pedestrians, and automobile traffic that would be generated by the Proposed Project is considered negligible to the existing conditions of the local streets. The effect of this alternative on traffic safety hazards would be the same as the Proposed Project. In addition, similar to the Proposed Project, improvement of the Bay Trail would have offsetting beneficial impacts by encouraging greater travel by bicycling and walking, including during commute periods. Consequently, the Restore Contractors Residence in Place Alternative would be *equivalent* to the Proposed Project for Transportation/Traffic.

Tribal Cultural Resources

As discussed in Cultural Resources, above, foundation work for building restoration would have significant unavoidable impacts on archaeological resources including Native American human remains. Potential impacts would be *greater than* the Proposed Project for Tribal Cultural Resources.

Utilities and Service Systems

The Restore Contractors Residence in Place Alternative would have similar water use and wastewater generation relative to the Proposed Project; in any case, the impacts of both this alternative and the Proposed Project would be less than significant. Impacts for the Restore Contractors Residence in Place Alternative would be *equivalent to* the Proposed Project for Utilities and Service Systems.

Comparison to Project Objectives

As shown in **Table 5-2**, the Restore Contractors Residence in Place Alternative would meet most of the Project objectives, as does the Proposed Project, but would fail to meet the objective of protecting and/or enhancing cultural (archaeological) resources.

5.3 Relocate and Restore Contractors Residence Alternative

Principal Characteristics

The Relocate and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would be relocated to the Farm Yard Agricultural Unit, to a site that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Moving the Contractors Residence would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer.

Impact Analysis

Aesthetics

The Relocate and Restore Contractors Residence Alternative would look slightly different from the Proposed Project in that it would include a restored Contractors Residence in the Farm Yard Agricultural Unit on the Project site, rather than disassembling the structure and returning the original building site to a more natural appearance. The restored Contractors Residence in the Farm Yard Agricultural Unit would block views of the Coyote Hills, an important scenic resource. In other respects, the Relocate and Restore Contractors Residence Alternative would have similar aesthetic impacts as the Proposed Project. Because the restoration of the Contractors Residence in a new location in the Farm Yard Agricultural Unit could adversely affect scenic views, impacts would be *greater* than the Proposed Project, and the Relocate and Restore Contractors Residence Alternative would be *worse* for Aesthetics.

Agriculture and Forest Resources

Similar to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have little or no impact on agriculture and forest resources. Therefore, the Relocate and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Agriculture and Forest Resources.

Air Quality

Air emissions during operation, and the area graded and disturbed for wetland and habitat enhancement would be the same for the Relocate and Restore Contractors Residence Alternative as the Proposed Project; however, there would be more use of construction equipment because of the relocation and restoration of the Contractors Residence. Air emissions would be greater to the Proposed Project, and the Relocate and Restore Contractors Residence Alternative would be *worse* for Air Quality.

Biological Resources

The Relocate and Restore Contractors Residence Alternative would create or enhance seasonal wetlands and upland habitat, including the site from which the Contractors Residence would be removed. However, mobilization of the heavy equipment necessary to move the structure would damage sensitive biological resources in the Patterson Slough Natural Unit near of the Contractors Residence. The new location of the Contractors Residence in the Farm Yard Agricultural Unit would have lower biological sensitivity. Overall, the Relocate and Restore Contractors Residence Alternative would be *less beneficial* than the Proposed Project for Biological Resources.

Cultural Resources

The Relocate and Restore Contractors Residence Alternative would avoid the significant unavoidable impact of loss of the historic structure; however, the building would lose its integrity of location and setting through relocation. In addition, moving the structure would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer. This procedure is expected to cause substantial damage to the underlying sub-surface archaeological resources, which may include Native American human remains. This would create a significant unavoidable impact on cultural resources. Thus, this alternative would avoid or reduce a significant unavoidable adverse impact on historic architectural resources, but would create a significant unavoidable impact on archaeological resources including Native American human remains. Therefore, the Relocate and Restore Contractors Residence Alternative and the Proposed Project would both have significant unavoidable impacts on cultural resources, and in this sense would be *equivalent* for Cultural Resources.

Geology and Soils

Like the Proposed Project, the Relocate and Restore Contractors Residence Alternative would include wetland and habitat restoration and enhancement, and visitor serving facility and trail construction. There would be more heavy equipment mobilization associated with moving the Contractors Residence under this alternative, with increased risk of erosion. Therefore, impacts would be *greater*, and the Relocate and Restore Contractors Residence Alternative would be *worse* to the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Operation of the Relocate and Restore Contractors Residence Alternative would generate greenhouse gas emissions similar to the Proposed Project. The use of heavy equipment for moving and restoration of the Contractors Residence would be higher for the Relocate and Restore Contractors Residence Alternative as compared to the Proposed Project, in which the building would be disassembled with hand equipment. Impacts of construction would be *greater* than the Proposed Project, and the Relocate and Restore Contractors Residence Alternative would be *worse* for GHG emissions.

Hazards and Hazardous Materials

Under the Relocate and Restore Contractors Residence Alternative, there would be some increased risk of accidental spills of heavy equipment diesel and hydraulic fluids associated with greater use of heavy equipment for movement and restoration of the Contractors Residence. Overall, the risks are considered

greater for the Relocate and Restore Contractors Residence Alternative than the Proposed Project, and impacts would be *worse* for Hazards and Hazardous Materials.

Hydrology and Water Quality

Operation of the Relocate and Restore Contractors Residence Alternative would have similar impacts on hydrology as the Proposed Project. The Relocate and Restore Contractors Residence Alternative would involve more heavy equipment use for the movement and, possibly, restoration of the Contractors Residence. The Relocate and Restore Contractors Residence Alternative would consequently have more risk of erosion. Therefore, the Relocate and Restore Contractors Residence Alternative would be *worse* than the Proposed Project for hydrology and water quality impacts.

Land Use and Planning

Impacts from the Relocate and Restore Contractors Residence Alternative on established communities and conflicts in land uses would be similar to those of the Proposed Project. The Relocate and Restore Contractors Residence Alternative would have less conflict with plans and policies that call for preservation of historic buildings, but more conflict with plans and policies that call for preservation of archaeological resources. Overall, the impact of this alternative would be similar and *equivalent to* the Proposed Project for Land Use and Planning.

Mineral Resources

Similar to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have little impact on mineral resources. Therefore, the Relocate and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Mineral Resources.

Noise

Noise impacts during the construction phases of the Relocate and Restore Contractors Residence Alternative would be greater than the Proposed Project, as there would be more heavy equipment use during movement and restoration of the Contractors Residence. Compared to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have a similar number of Park visitors who would be exposed to existing ambient noise conditions. Overall, the Relocate and Restore Contractors Residence Alternative would have greater noise impacts and be *worse* than the Proposed Project.

Population and Housing

Similar to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have little impact on population and housing. Therefore, the Relocate and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Population and Housing.

Public Services

Both the Proposed Project and the Relocate and Restore Contractors Residence Alternative would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The Relocate and Restore Contractors Residence Alternative would be *equivalent* in impacts on public services to the Proposed Project.

Recreation

The Relocate and Restore Contractors Residence Alternative would provide similar facilities and area for recreation use. Potential impacts would be *equivalent to* the Proposed Project for Recreation.

Transportation / Traffic

Since the public access improvements and recreational facilities constructed for the Relocate and Restore Contractors Residence Alternative would be similar to the Proposed Project, the number of additional visitors also would be similar, due to similarly increased recreational opportunities. The level of additional bicycles and pedestrians, and automobile traffic that would be generated by the Proposed Project is considered negligible to the existing conditions of the local streets. The effect of this alternative on traffic safety hazards would be the same as the Proposed Project. In addition, similar to the Proposed Project, improvement of the Bay Trail would have offsetting beneficial impacts by encouraging greater travel by bicycling and walking, including during commute periods. Consequently, the Relocate and Restore Contractors Residence Alternative would be *equivalent* to the Proposed Project for Transportation/Traffic.

Tribal Cultural Resources

As discussed in Cultural Resources, above, mobilization of heavy equipment for moving the Contractors Residence would have significant unavoidable impacts on archaeological resources including Native American human remains. Potential impacts would be *greater* than the Proposed Project for Tribal Cultural Resources.

Utilities and Service Systems

The Relocate and Restore Contractors Residence Alternative would have similar water use and wastewater generation relative to the Proposed Project; in any case, the impacts of both this alternative and the Proposed Project would be less than significant. Impacts for the Relocate and Restore Contractors Residence Alternative would be *equivalent to* the Proposed Project for Utilities and Service Systems.

Comparison to Project Objectives

As shown in **Table 5-1**, the Relocate and Restore Contractors Residence Alternative would meet most of the Project objectives, as does the Proposed Project, but would fail to meet the objective of protecting and/or enhancing cultural (archaeological) resources.

5.4 Hand Disassemble, Relocate, and Restore Contractors Residence Alternative

Principal Characteristics

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Like the Proposed Project, this alternative would involve dismantling of the Contractors Residence with hand tools. Unlike the Proposed Project, the Contractors Residence would be relocated at a site in the Farm Yard Agricultural Unit that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rebabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Compared to the other alternatives discussed above, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would involve more work done by hand.

Impact Analysis

Aesthetics

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would look slightly different from the Proposed Project in that it would include a restored Contractors Residence in the Farm Yard Agricultural Unit on the Project site, rather than removing the structure and returning the building site to a more natural appearance. The restored Contractors Residence in the Farm Yard Agricultural Unit would block views of the Coyote Hills, an important scenic resource. In other respects, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have similar aesthetic impacts as the Proposed Project. Because the restoration of the Contractors Residence in a new location in the Farm Yard Agricultural Unit could adversely affect scenic views, impacts would be *greater* than the Proposed Project, and

the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* for Aesthetics.

Agriculture and Forest Resources

Similar to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have little or no impact on agriculture and forest resources. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Agriculture and Forest Resources.

Air Quality

Air emissions during operation, and the area graded and disturbed for wetland and habitat enhancement would be the same for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative as the Proposed Project; however, there would be more use of construction equipment because of the dismantling, relocation, and restoration of the Contractors Residence. Air emissions would be greater to the Proposed Project, and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* for Air Quality.

Biological Resources

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would create or enhance seasonal wetlands and upland habitat, including the site from which the Contractors Residence would be removed. Like the Proposed Project, disassembly of the Contractors Residence with hand tools would avoid damage to sensitive biological resources in the Patterson Slough Natural Unit near the Contractors Residence. The new location of the Contractors Residence in the Farm Yard Agricultural Unit would have lower biological sensitivity. Overall, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent to* the Proposed Project for Biological Resources.

Cultural Resources

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would avoid the significant unavoidable impact of loss of the historic structure; however, the building would lose its integrity of location and setting through relocation. Disassembly with hand tools would avoid damage to the underlying subsurface archaeological resources, which may include Native American human remains. Thus, this alternative would avoid the significant unavoidable adverse impact of loss of historic architectural resources, but would result in loss of the building's integrity of location and setting. Because this alternative, like the Proposed Project, would avoid impacts on archaeological resources, and would have a smaller impact on historic architectural resources than the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have *lesser* impacts on Cultural Resources.

Geology and Soils

Like the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would include wetland and habitat restoration and enhancement, and visitor serving facility and trail construction. There would be more heavy equipment mobilization associated with restoring the Contractors Residence under this alternative, with increased risk of erosion. Therefore, impacts would be *greater*, and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* than the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Operation of the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would generate greenhouse gas emissions similar to the Proposed Project. The use of construction equipment for restoration of the Contractors Residence would be higher for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative as compared to the Proposed Project. Impacts of construction would be greater than the Proposed Project, and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* for GHG emissions.

Hazards and Hazardous Materials

Under the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative, there would be some increased risk of accidental spills of heavy equipment diesel and hydraulic fluids associated with greater use of construction equipment for restoration of the Contractors Residence. Overall, the risks are considered greater for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative than the Proposed Project, and impacts would be *worse* for Hazards and Hazardous Materials.

Hydrology and Water Quality

Operation of the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have similar impacts on hydrology as the Proposed Project. The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative may involve more heavy equipment use for the restoration of the Contractors Residence. This Alternative would consequently have more risk of erosion. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* than the Proposed Project for hydrology and water quality impacts.

Land Use and Planning

Impacts from the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative on established communities and conflicts in land uses would be similar to those of the Proposed Project. This Alternative would have somewhat less conflict with plans and policies that call for preservation of historic buildings, and would not conflict with plans and policies that call for preservation of archaeological resources. Overall, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *better* than the Proposed Project for Land Use and Planning.

Mineral Resources

Similar to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have little impact on mineral resources. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Mineral Resources.

Noise

Noise impacts during the construction phases of the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be greater than the Proposed Project, as there would be more construction equipment use during restoration of the Contractors Residence. Compared to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have a similar number of Park visitors who would be exposed to existing ambient noise conditions. Overall, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have *greater* noise impacts and be *worse* than the Proposed Project.

Population and Housing

Similar to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have little impact on population and housing. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Population and Housing.

Public Services

Both the Proposed Project and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent* in impacts on public services to the Proposed Project.

Recreation

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would provide similar facilities and area for recreation use. Potential impacts would be *equivalent to* the Proposed Project for Recreation.

Transportation / Traffic

Since the public access improvements and recreational facilities constructed for the Hand Disassemble Relocate, and Restore Contractors Residence Alternative would be similar to the Proposed Project, the number of additional visitors also would be similar, due to similarly increased recreational opportunities. The level of additional bicycles and pedestrians, and automobile traffic that would be generated by the Proposed Project is considered negligible to the existing conditions of the local streets. The effect of this alternative on traffic safety hazards would be the same as the Proposed Project. In addition, similar to the Proposed Project, improvement of the Bay Trail would have offsetting beneficial impacts by encouraging greater travel by bicycling and walking, including during commute periods. Consequently, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent* to the Proposed Project for Transportation/Traffic.

Tribal Cultural Resources

Like the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence would dismantle the Contractors Residence with hand tools. This would avoid impacts on subsurface archaeological resources in the area, which could include Native American human remains. The Hand Disassemble, Relocate, and Restore Contractors Residence would have similar and *equivalent* impacts to the Proposed Project in terms of Tribal Cultural Resources.

Utilities and Service Systems

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have similar water use and wastewater generation relative to the Proposed Project; in any case, the impacts of both this alternative and the Proposed Project would be less than significant. Impacts for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent to* the Proposed Project for Utilities and Service Systems.

Comparison to Project Objectives

As shown in **Table 5-1**, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would meet most of the Project objectives, as does the Proposed Project, but would partially fail to meet the objective of protecting and/or enhancing cultural (historic architectural) resources.

5.5 Environmentally Superior Alternative

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the Environmentally Superior Alternative. Although it would have greater environmental impacts than the Proposed Project with respect to some impact categories, mitigation measures could reduce these impacts to a less-than-significant level for both this alternative and the Proposed Project, with the exception of impacts on historic architectural resources, which would be significant and unavoidable under the Proposed Project. In the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative, the historic Contractors Residence would be preserved, albeit in a different location, with consequent loss of integrity of site and

setting. Nevertheless, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would substantially reduce impacts on historic architectural resources, while avoiding significant impacts on archaeological resources and buried human remains. For these reasons, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be would be the Environmentally Superior Alternative.

5.6 Alternatives Considered But Rejected

Several alternatives for public access and restoration were considered during the planning stages. The following alternatives were considered but rejected.

Preserve Contractors Residence in Place Alternative

The Preserve Contractors Residence in Place Alternative would not fully restore the Contractors Residence, but would prevent further deterioration of the structure, through annual inspections of the building's condition, weathertightness, and vandal resistance. Repairs and maintenance would be conducted as necessary in a timely fashion, and in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). The intent of this alternative is to maintain the building until such time as it would be fully restored and/or moved from its present location.

This alternative was rejected because, if it eventually results in restoration and/or moving of the Contractors Residence, it would be similar in effect and environmental impacts to the alternatives evaluated above: 1) Restore Contractors Residence in Place Alternative, 2) Relocate and Restore Contractors Residence Alternative, 3) Hand Disassemble, Relocate, and Restore Contractors Residence Alternative. Thus, in the case of eventual restoration, this alternative is not meaningfully different from alternatives evaluated above.

If the Contractors Residence is never restored or moved, this alternative would be less effective at protecting and/or enhancing cultural resources than the alternatives evaluated above. In addition, a structure that is not available for public use would exist permanently on the site. Thus, in the case that restoration never occurs, this alternative would be less effective at protecting cultural resources than the alternatives evaluated above.

For these reasons, the Preserve Contractors Residence in Place Alternative is considered inferior to the alternatives evaluated above. Therefore, the Preserve Contractors Residence in Place Alternative to the Proposed Project is rejected.

Alternative Locations for the Entire Proposed Project

Alternative locations for the Proposed Project were rejected because the Project is specific to the unique conditions of the Project site, which is adjacent to the existing Coyote Hills Regional Park and contains Patterson Slough, a unique but degraded resource that would be restored. In addition, it would be very difficult or impossible to find an undeveloped area of similar size and open space values in the Project vicinity. Alternative locations would fundamentally fail to meet the objectives of the Proposed Project, including integration of the Expansion Area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area managed by California Department of Fish and Wildlife, and the US Fish and Wildlife Service. Therefore, an offsite location as an alternative for the Proposed Project is rejected.

Eliminate Patterson Slough Overlook (West-side) Spur Trail and Relocate Parking and Picnic Areas Alternative

An alternative that would relocate the Proposed Project's 100-car parking lot and picnic area from north of Patterson Ranch Road to a site south of Patterson Ranch Road, and eliminate the proposed Patterson Slough West Spur Trail, was considered. In all other respects, this alternative would be the same as the Proposed Project.

The Proposed Project's location north of Patterson Ranch Road for the 100-car parking lot and picnic area consists of low-quality, degraded ruderal habitat that was farmed until recently. The area south of Patterson Ranch Road is the best agricultural land on the Project site, based on soils and available irrigation water supply. Relocating the parking lot and picnic area would avoid development of approximately 1.5 acres of low-quality habitat area north of Patterson Ranch Road, but would eliminate 1.5 acres of quality agricultural land south of the Road. Under the Proposed Project, the area north of Patterson Ranch Road would be restored as Oak savanna, or enhanced grasslands and created seasonal wetlands. Conditions are less suitable for mixed riparian forest restoration for much of this area. As discussed in Chapter 4.1 Biological Resources, all biological impacts of the Proposed Project, including the parking and picnic areas north of Patterson Ranch Road, would be reduced to a less-than-significant level by mitigation measures identified in the EIR. The same mitigation measures applied to this alternative would similarly reduce biological impacts to a lessthan significant level. Thus, this alternative would not be better than the Proposed Project in terms of impacts on biological resources. However, unlike the Proposed Project, this alternative would eliminate approximately 1.5 acres of agricultural land. This would conflict with the Proposed Project's objective of "Providing opportunities for urban agriculture" and may potentially conflict with City of Fremont General Plan Goals, and Open Space and Agriculture Easement conditions.

The proposed alignment of the Patterson Slough Overlook (West-side) Spur Trail and Wildlife Observation Platform is located along an existing dirt road to farm labor housing that formerly existed on the Project site. This existing road would remain in place even if the Patterson Slough West Spur Trail is eliminated from the Project and continue to be used for site management, including weed suppression, fire fuels reduction, and mosquito and vector control access. Under the Proposed Project, wildlife-friendly fences and trail signs would protect adjacent existing and proposed restored riparian habitat areas from the Overlook Spur Trail and Wildlife Observation Platform. Only foot traffic would be allowed on this trail, no bicycles would be allowed, and no dogs allowed, even on leash. The proposed Wildlife Observation Platform would be set back a minimum of 100 feet from the edge of the riparian corridor, and also screened with landscape mounds and native landscape plantings. This is greater than the City of Fremont's requirement of a 30-foot development setback from streamcourses, and for which the Park District has voluntarily agreed to meet or exceed the Ordinance requirements. As mentioned above, all biological impacts of the Proposed Project, including the Patterson Slough Overlook (West-side) Spur Trail, would be reduced to a less-than-significant level by mitigation measures identified in the EIR. For these reasons, elimination of the Spur Trail would not substantially reduce the Project's impacts on biological resources.

This alternative would not prevent the significant unavoidable impact of the loss of the historic Contractors Residence on the Project site.

Because the Eliminating the Overlook (West-side) Spur Trail and Relocate Parking and Picnic Areas Alternative would eliminate 1.5 acres of agricultural land, but would not avoid impacts on historic architectural resources or substantially reduce impacts on biological resources, this alternative is rejected.

6 CEQA REQUIRED ASSESSMENT

As required by CEQA, this chapter provides an assessment of the proposed Coyote Hills Restoration and Public Access Project with respect to growth inducement, unavoidable significant impacts, significant irreversible changes, impacts found not to be significant, cumulative impacts, and relationship between short-term and long-term uses of the environment.

6.1 Growth Inducement

A project is considered to be growth inducing if it fosters economic or population growth beyond the boundaries of the Project site by, for example, the extension of urban services or transportation infrastructure to an underserved area, or the removal of major barriers to development. Not all growth inducement is necessarily negative. Negative impacts associated with growth inducement occur only where the projected growth would cause adverse environmental impacts.

Growth-inducing impacts fall into two general categories: direct and indirect. Direct growth-inducing impacts would occur if the Proposed Project directly increased population growth in the area. Providing urban services to a site, and the subsequent development, can serve to induce other landowners in the vicinity to convert their property to urban uses. Indirect, or secondary growth-inducing impacts, consist of growth induced in the region by additional demands for housing, goods and services associated with the population increase caused by, or attracted to, a new project.

Direct Impacts

The proposed Coyote Hills Project is a park restoration and public access project, consisting of components identified in the Land Use Plan Amendment, that would not result directly in any new housing or jobs in the area, and would not have any direct growth-inducing impacts. Therefore, the Proposed Project would not have a significant direct growth-inducing impact.

Indirect Impacts

The Coyote Hills Project would not significantly exceed growth that is projected for the city of Fremont. As a result of the Proposed Project, the public recreation opportunities of this area of Fremont would be enhanced. It is likely this would attract additional visitors to the area. However, the Project site is adjacent to Coyote Hills Regional Park, which is already open and used for recreation. The addition of visitor serving facilities such as parking lot, picnic area, and trails, and enhancement of the habitats and wetlands at the Project site would not be a major change to the area. It would not create any new housing, and would create at most one new job as a park ranger. Therefore, the Proposed Project would not have a significant indirect growth-inducing impact.

6.2 Significant Unavoidable Impacts

As discussed in 4.2 Cultural and Tribal Cultural Resources, disassembly of the Contractors Residence would result in a Significant and Unavoidable Impact on historic architectural resources. No other Significant and Unavoidable Impacts were found to result from the Proposed Project.

6.3 Significant, Irreversible Changes

CEQA requires that an EIR assess whether a project would result in significant irreversible changes in the environment. The CEQA Guidelines describe three distinct categories of irreversible changes that should be considered, as further detailed below.

Changes in Land Use that Commit Future Generations

As discussed in Section X. Land Use and Planning of the Initial Study (see **Appendix A**), the Proposed Project is consistent with the municipal land use plans of Fremont. The proposed Coyote Hills Project is not a development project, in the sense that it would restore the majority of land at the site to a more natural state, with the exception of visitor serving facilities including a parking lot, restroom, potable water, picnic area, trails, utility upgrades, entry kiosk, pedestrian and bicycle improvements at the intersection of Paseo Padre Parkway and Patterson Ranch Road, and interpretive elements. Because the Proposed Project would maintain almost all of the Project site as undeveloped, open space uses, it would not make land use changes that commit future generations. As discussed above, the Proposed Project would not have any significant indirect growth-inducing impacts. Therefore, the Proposed Project would not make land use changes that commit future generations.

Irreversible Damage from Environmental Accidents

The Initial Study, in Section VIII. Hazards and Hazardous Materials, (see **Appendix A**) found that irreversible changes to the environment could occur from accidental releases of hazardous materials, and disturbance and handling of soil contaminated with residual low-level pesticides, associated with Project development, but that implementation of mitigation measures identified in the Initial Study and compliance with hazardous materials regulations and policies would reduce this impact to a less-than-significant level. No other irreversible changes would result from implementation of the Proposed Project.

Consumption of Natural Resources

The Initial Study (see **Appendix A**) found that the number of facilities constructed by the Proposed Project that would require energy would be low, and therefore not result in a substantial increase in energy use, and that no agricultural lands would be converted and no access to mining reserves would be lost. Construction of the Proposed Project would involve energy use, but this use would not be wasteful or inefficient, nor would it require new or expanded electric power or natural gas facilities. For these reasons, the Coyote Hills Project would not result in a substantial increase in consumption of natural resources.

6.4 Impacts Found Not to be Significant

Under CEQA, environmental issues for which there is no likelihood of an impact do not need to be included in the EIR and may be "scoped out" during the EIR scoping process. The following issues were found to have less-than-significant or no impacts by the Initial Study and are not analyzed further in this EIR.

- ♦ Agriculture and Forest Resources
- ♦ Greenhouse Gas Emissions
- ♦ Land Use and Planning
- ♦ Mineral Resources
- ◆ Population and Housing
- ◆ Public Services

In addition, the Initial Study found no significant impacts after implementation of mitigation measures identified in the Initial Study in the following eight subjects, which are not analyzed further in this EIR:

- ♦ Aesthetics
- ♦ Air Quality
- ♦ Geology and Soils
- Hazards and Hazardous Materials
- ♦ Hydrology and Water Quality
- ♦ Noise
- ♦ Recreation
- Utilities and Service Systems

6.5 Cumulative Impacts

CEQA requires consideration of the potential cumulative impacts that could result from a project in conjunction with other similar projects in the vicinity. Such impacts can occur when two or more individual effects together create a considerable environmental impact or compound other environmental consequences. Current and reasonably foreseeable future projects in the vicinity of the Project site, consisting of proposed, approved, and under construction projects, are described in Chapter 4. Environmental Evaluation, Cumulative Impact Analysis. The potential cumulative effects of the Proposed Project are analyzed below. The goal of such an evaluation is twofold: first, to determine whether the combined impacts of all such projects would be cumulatively significant; and second, to determine whether the Proposed Project itself would cause a "cumulatively considerable" (and thus significant) incremental contribution to any such cumulatively significant impacts.

Aesthetics

The locations of proposed, recently approved, and under construction projects in the Project vicinity are dispersed. From any single vantage point in the Project vicinity, only one or a small number of these projects would be visible, and none of the projects would be visually prominent. Together, these projects would not significantly alter the mixed visual character to the Project vicinity, which consists of urban development east of the Project site and open space uses on and west of the Project site. For these reasons, the effects of past, current and probable future projects would not result in a significant cumulative impact on aesthetics. As an overall result of the Proposed Project, the aesthetic conditions of the Project site would remain in open space and be enhanced, for example by improving the appearance of the Park entry and maintaining views of the prominent Coyote Hills. Therefore, the Proposed Project would not have a cumulatively considerable impact on aesthetics because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future project's cumulative impact on aesthetics would be *less than significant*.

Agriculture and Forest Resources

The Proposed Project would have little or no adverse impact on agriculture and forest resources, and therefore would not make a cumulatively considerable contribution to regional impacts on agriculture and forest resources. Current urban agricultural uses would be preserved, and facilitated or encouraged. The Proposed Project's cumulative impact on agriculture and forest resources would be *less than significant*.

Air Quality

The Bay Area Air Quality Management District (BAAQMD) guidelines for CEQA analysis state:

"By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in [regional] nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on [regional] air quality would be considered significant."

"In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary."

There are two general classes of air pollutants and cumulative significance is assessed differently for each. The first class, called "criteria" pollutants, have associated federal and/or state ambient air quality standards. For them, if project emissions cause an ambient concentration to exceed an ambient standard at a local receptor, this impact is considered to be cumulatively significant to regional air quality (especially if the region has a history of monitored violations of that ambient air quality standard, i.e., is a "nonattainment" area). But project emissions of a criteria air pollutant can also be cumulatively significant without causing local ambient air quality standards violations if they exceed the average daily and or maximum annual emission thresholds established by the BAAQMD in their CEQA Guidelines. The Proposed Project's emissions of ozone precursors (ROG or NOx) or inhalable/fine particulate matter from construction or operational sources would have no locally significant ambient air quality impacts, nor would they exceed the BAAQMD CEQA thresholds. Therefore, the Proposed Project would not contribute considerably to regional air quality problems with ozone or particulates and this cumulative impact would be *less than significant*.

For the 2nd class of air pollutants, called "toxic air contaminants" (TACs), their project-level and cumulative impacts are determined by separate cancer risk and non-cancer health hazard standards established by the BAAQMD in their CEQA Guidelines. If project emissions of a TAC cause risk/hazard levels at a local receptor within 1000 feet of the source to exceed the project-level thresholds, this would be a significant project-level TAC impact. If project TAC emissions plus the TAC emissions from all other sources within 1000 feet of a project site have total risk/hazard levels exceeding the BAAQMD cumulative thresholds at the receptor, this would be a significant cumulative TAC impact. There could also be cases where a project has a significant project-level impact, with no significant cumulative impact; or where it contributes to a significant cumulative impact, but has no significant project-level impact. For the Proposed Project, there are existing sensitive receptors within 1,000 feet of the Project site (i.e., the homes fronting Paseo Padre Parkway or Ardenwood Boulevard east of the site). But according to estimates of risk/hazard from Project construction TAC (from SCREEN3 dispersion analysis) and from the worst-case summation of risk/hazard from other existing TAC sources (from BAAQMD permit data or roadway screening) within 1000 feet of these residential receptors, the combined TAC emissions would not exceed the BAAQMD's cumulative risk/hazard thresholds and the Project would not contribute considerably to significant cumulative TAC air quality impact; this would be less than significant.

Biological Resources

In the Project vicinity, the effect of the combination of the existing built environment, plus the proposed, approved, and under construction projects identified in 4 Environmental Evaluation, Cumulative Impact Analysis, has resulted in a historic and a significant loss of habitats, and significant reductions in the populations in a number of plant and animal species. As a result, these species have been identified by the state and/or federal governments as requiring protection. This is a significant cumulative impact on biological resources. Given the minimal adverse impact, and beneficial effects of the proposed habitat restoration and

enhancement, on biological resources expected by the Project, and the extensive project specific mitigation measures proposed for the Project, which would reduce the Project's adverse impacts to biological resources to a less than significant level, the Project would not have a cumulatively considerable impact on biological resources. Thus, the Proposed Project would not make a considerable contribution to significant cumulative impacts on biological resources. This impact would be *less than significant*.

Cultural Resources

The effect of the combination of past projects, current projects identified in the Project vicinity (see 4.2 Cultural and Tribal Cultural Resources, Cumulative Analysis), and probable future projects is a significant cumulative loss of cultural and archaeological resources, including Native American middens and human remains and historic architectural resources. Mitigation measures identified in this EIR (see 4.2 Cultural and Tribal Cultural Resources) would reduce the impact of the Proposed Project on archaeological resources, tribal cultural resources, and human remains to a less-than-significant level. Mitigation measures identified in this EIR also would reduce the impact of the Proposed Project on the historic Milk House to a less-than-significant level, but would not reduce the impact of disassembly of the Contractors Residence to a less-than-significant level. This component of the Proposed Project would result in a significant unavoidable adverse impact to the historic Contractors Residence. Given the past destructive activities on the Project site, and the significant unavoidable impact on cultural resources, when viewed in connection with the effects of past, current and probable future projects. The impact of the Project on cultural resources would be *significant and unavoidable*.

Geology and Soils

The Proposed Project would not cause any substantial changes to the geology at the Project site. New development at the Coyote Hills Expansion site would not increase the risk of geologic hazards. As it is likely that many of the park's visitors would be from the Bay Area or California, their visits to the Project site would not expose them to any greater risks than other parts of the East Bay shoreline because California is seismically-active in general.

The impacts of locating the proposed, approved, and under construction projects identified in the Project vicinity in a seismically active zone are mostly project specific local impacts that would not contribute to, in an additive sense, the cumulative impacts on geology and soils. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on geology and soils. The Proposed Project would not have a cumulatively considerable adverse impact on geology and soils, as the impact would be local and would not contribute to, in an additive sense, the cumulative impact. Moreover, the incremental effects of the Project, with mitigation, would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Greenhouse Gas Emissions

Because no single project is individually large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis in Initial Study Section VII Greenhouse Gas Emissions (see **Appendix A**). Construction of the Proposed Project would generate about 131 metric tons (MT) of GHG during its first year construction period. Because construction emissions are short-term and would cease upon completion, GHG from construction activities would only nominally contribute to GHG emissions impacts. Operation of the Project would contribute to global climate change through emissions of about 284 MT of GHG per year, mainly from transportation sources. Project GHG emissions would be substantially below the BAAQMD's 1,100 MT/year significance threshold. In addition, the Project would be consistent with the GHG reduction goals of California's AB 32, and the City of Fremont *Climate Action Plan*. For these reasons, the Project's cumulative contribution to GHG emissions during construction and operation would be *less than significant*.

Hazards and Hazardous Materials

The Proposed Project would not increase the impact of hazards or hazardous materials in the general vicinity of the Project area. Remediation of the potentially contaminated soils at the site, if necessary, and as stipulated in mitigation measures identified in the Initial Study (see **Appendix A**), would reduce the likelihood of release to the environment. The Project's hazardous material impact would be a local impact and would not contribute to the cumulative impact of hazardous materials. Likewise, other development projects in the Project area would not contribute to, in an additive sense, the cumulative impacts of hazardous materials to the environment. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on hazardous materials. Moreover, the Project would not make a cumulatively considerable contribution to a significant cumulative impact of hazardous materials because the incremental effects of the Project, with mitigation, would not be considerable when viewed in connection with the effects of past, current and probable future project. This impact would be *less than significant*.

Hydrology and Water Quality

In the Project vicinity, the effect of the combination of the existing built environment, plus the proposed, approved, and under construction projects identified in 4 Environmental Evaluation, Cumulative Impact Analysis, is a significant increase in waterborne contaminants, and velocity and volume of stormwater runoff. This is a significant cumulative impact on hydrology and water quality. The Proposed Project would not have a cumulatively considerable adverse impact on hydrology and water quality since measures are required to be in place to avoid project-related water quality and hydrology impacts, and the Project would comply with applicable resource protection requirements for construction and operation of the Project that were created by agencies, such as the City of Fremont and the Regional Water Quality Control Board, to avoid water quality and hydrology impacts. As a result, the Proposed Project would not measurably contribute to cumulative water quality and hydrology impacts. Thus, the incremental effects of the Project, with mitigation, would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Land Use and Planning

None of the projects that are proposed, approved, or under construction in the Project vicinity involve land uses that would physically divide an established community, create a significant land use conflict, conflict with applicable plans and policies, or increase existing conflicts with applicable plans and policies. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on land use and planning. As discussed in the Initial Study, the Coyote Hills Project has been found to have a less-than-significant impact on land use, and none of the proposed, approved, and under construction projects identified in the Project vicinity would be incompatible with the Proposed Project. For these reasons, the Project would not make a cumulatively considerable contribution to a significant cumulative impact on land use and planning because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Mineral Resources

The Proposed Project would not substantially affect the availability of designated mineral resources, and therefore would not make a cumulatively considerable contribution to cumulative impacts on mineral resources. The Proposed Project's cumulative impact on mineral resources would be *less than significant*.

Noise

The Proposed Project site would be used for recreation, a noise-sensitive land use according to the City of Fremont General Plan. Cumulative (Year 2035) traffic noise levels take into account projected vehicular trips along local roadway links generated by existing development plus anticipated growth in the Project area, including proposed, approved and under construction projects, as evaluated in 4.3 Transportation of this EIR. The Proposed Project would add only 0.01 dBA to the area's major arterial roadway links compared to Year 2035 baseline (without the Project), an increment that falls far short of the City of Fremont and Federal Transit Agency significance criteria. The cumulative projects in the Project vicinity would generate noise primarily through additional vehicle traffic. Motor vehicle traffic on Paseo Padre Parkway would grow by about 50% with a consequent 1.5 dB noise level increase over the next 20 years, but the Proposed Project would not make a cumulatively considerable contribution to the cumulative noise impact to sensitive receptors along the roadway. Thus, the Proposed Project would have a *less than significant* impact on cumulative noise.

Population and Housing

The Proposed Project would have little or no impact on population and housing, and therefore would not make a cumulatively considerable contribution to regional cumulative impacts on population and housing. The Proposed Project's cumulative impact on population and housing would be *less than significant*.

Public Services

The result of the proposed, approved, and under construction projects identified in the Project vicinity, in combination with past development, is a level of demand that could require new or physically altered police and fire facilities, including police and fire stations, police and fire protection vehicles and equipment, and police and fire protection personnel. This is a potentially significant cumulative impact on police and fire protection. As discussed in the Initial Study, Section XIV. Public Services, the Proposed Project would not require new or physically altered police or fire facilities. Because the Proposed Project would have a minimal effect on the need for new public services, including fire and police, the Project would not make a cumulatively considerable contribution to cumulative impacts on public services, when viewed in connection with the effects of past, current and probable future projects. Therefore, the Project's cumulative impacts on public services, including police and fire protection, would be *less than significant*.

Recreation

The projects that are proposed, approved, and under construction in the Project vicinity include two recreation projects that would improve recreational facilities and opportunities. These projects, singly, in combination, and in combination with past projects, would not create significant adverse impacts on recreation. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on recreation. The Proposed Project would provide new recreational facilities and would not impact other recreational facilities or contribute to the need for new or physically altered park and recreational facilities. Thus, the Proposed Project would not contribute to cumulative impacts on recreation. This impact would be *less than significant*.

Transportation and Traffic

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. Growth in vehicle traffic due to past, current and probable future projects in the Project vicinity would result in a *potentially significant* cumulative impact. The forecast delay resulting from the Proposed Project at the Patterson Ranch Road approach would increase by up to 25 seconds between Cumulative Base and plus Project conditions. With

implementation of Mitigation Measures TRANSP-1 and TRANSP -2 (see 4.3 Transportation and Traffic, above), the Proposed Project would not make a cumulatively considerable contribution to transportation and traffic. Therefore, the cumulative impact of the Proposed Project on transportation would be *less than significant*.

Tribal Cultural Resources

The effect of the combination of past projects, the current projects identified in the Project vicinity (see 4.2 Cultural and Tribal Cultural Resources, Cumulative Analysis), and probable future projects could result in a significant impact on tribal cultural resources, including Native American human remains. Mitigation measures identified in this EIR would reduce the impact of the Proposed Project on tribal cultural resources and human remains to a less-than-significant level. Therefore, the Project would not have a cumulatively considerable adverse impact on tribal cultural resources because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. Thus, the Proposed Project would not contribute to cumulative impacts on tribal cultural resources. This impact would be *less than significant*.

Utilities and Service Systems

In the Project vicinity, the effect of the proposed, approved, and under construction projects identified in Chapter 4 Environmental Evaluation, in combination with past development, is a level of demand that may require new or physically altered water supply facilities, including dams, reservoirs, pipelines, pumping stations, and water treatment plants. This is a significant cumulative impact on water supply. As discussed in the Initial Study, Section XVIII Utilities and Service Systems, the Proposed Project would not require new or physically altered water supply facilities, and the water demand of the Project would be temporary and minimal. Therefore the Project would not contribute to cumulative impacts on water supply facilities or utilities and service systems. This impact would be *less than significant*.

Summary of Cumulative Impacts

As discussed above, the Proposed Project would make a considerable contribution to significant cumulative impacts on cultural resources.

6.6 Relationship Between Short-Term and Long-Term Uses of the Environment

Potential environmental impacts of the Proposed Project would be offset by the implementation of Project components including habitat and wetland enhancement and restoration, protection and management of surface and groundwater, climate change and sea level rise adaption, and Climate Smart farming practices. The long-term purposes of the Proposed Project include protecting and managing surface water and groundwater resources, providing opportunities for urban agriculture, developing and managing the Expansion area to be adaptable and sustainable, and providing opportunities for Climate Smart education as well as scientific research and demonstration. The Proposed Project is intended to be sensitive to the Project site's environmental resources and is subject to California State standards and guidelines, many of which ensure that strategic choices take appropriate account of long-term costs and benefits.

7 REPORT PREPARATION

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Appendix A Initial Study

INITIAL STUDY for

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA

> DRAFT March 7, 2019

Lead Agency:

East Bay Regional Park District P.O. Box 5381, Oakland, CA 94605 www.ebparks.org

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1.0 PROJECT DESCRIPTION AND PROPOSED DETERMINATION

1.1 Project Summary

The Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The existing Coyote Hills Regional Park is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84, leading to the Dumbarton Bridge (see **Figure 1 - Regional Location Map**). The 306-acre Expansion area borders the east side of the existing Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the to the north by the Alameda Creek Flood Control Channel.

The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and visitor-serving facilities and public access trail development proposed for the Expansion area. These components are discussed in more detail below.

The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, over 4 miles of new hiking trails, wildlife observation platforms, and approximately 130 acres of habitat restoration and enhancement. The Trail Plan would provide connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway to the south and north, and a connection to the City's proposed Dumbarton Bridge to Quarry Lakes and other regional trails. A flood control and wetlands mitigation Project covering about 100 acres in the southern part of the Project area would be constructed in cooperation with Alameda County Flood Control and Water Conservation District.

Proposed habitat restoration and enhancement types would include willow thicket and mixed riparian forest along and adjacent to Patterson Slough north of Patterson Ranch Road, as well as oak savanna, seasonal wetlands, and enhanced grasslands. The Project would protect existing views of the Coyote Hills along Paseo Padre Parkway, continue urban agriculture along this corridor, and preserve, protect and interpret the site's rich natural resources, Native American culture, and historic resources. Urban agriculture and agricultural-related activities, such as a farm stand, would be located on approximately 45 acres of land south of Patterson Ranch Road and north of Ardenwood Creek.

Provisions of Park District Ordinance 38 applicable to the adjoining Coyote Hills Regional Park would be extended to the Park Expansion area. As such, Park operating hours would be from dawn to dusk and no lighting other than security lighting in areas of buildings would be provided. Consistent with current regulations at Coyote Hills Park, the Park Expansion area would be designated as a "Leash Required Area" for Park visitors with dogs, with no leash optional open areas. Signage and fencing would be used to keep Park visitors, including un-leashed dogs, on trails and other designated public areas and out of existing and restored habitat. The remnant existing and restored willow thicket and mixed riparian area along Patterson Slough would be fenced, signed, and designated as a "Special Protection Feature." All general public access would be restricted from this area, with the exception of a foot path spur trail leading to a wildlife observation platform on the southwest end of the Slough. The west Slough overlook or footpath would follow an existing dirt maintenance access road to a proposed wildlife observation platform at the location of the demolished former Farm Labor House dormitories. These were demolished in 2016.

Restoring Park resources and managing the Park as a "Climate Smart Park," including accommodating climate change and anticipated San Francisco Bay sea level rise-related threats to the Park's resources, and using urban agriculture and a relatively large native tree afforestation Project to trap or sequester atmospheric carbon and other greenhouse gases (GHGs), are other important components of the Proposed Project. The Project would also provide opportunities for cooperative research and public education on these issues within the Park Expansion area. The Project components would be implemented over a three- to five-year period, as funding and capacity allows.



As lead agency, the Park District has prepared this environmental document in accordance with the California Environmental Quality Act (CEQA). This document presents the recommendations and actions contained in the LUPA that would result in physical changes to the baseline environmental conditions within the Project Area. The proposed physical changes, referred to collectively as the "Project," are summarized in this Project Description. Additional, more detailed descriptions of these proposals, as found in the LUPA and supporting documents for the Park Development Plan, including the Existing Environmental Conditions and Opportunities and Constraints Report, are incorporated by reference into this CEQA document.

1.2 Planning and Design Principles and Program Objectives

The LUPA and Park Development Plan have been developed with the following general design principles and planning objectives:

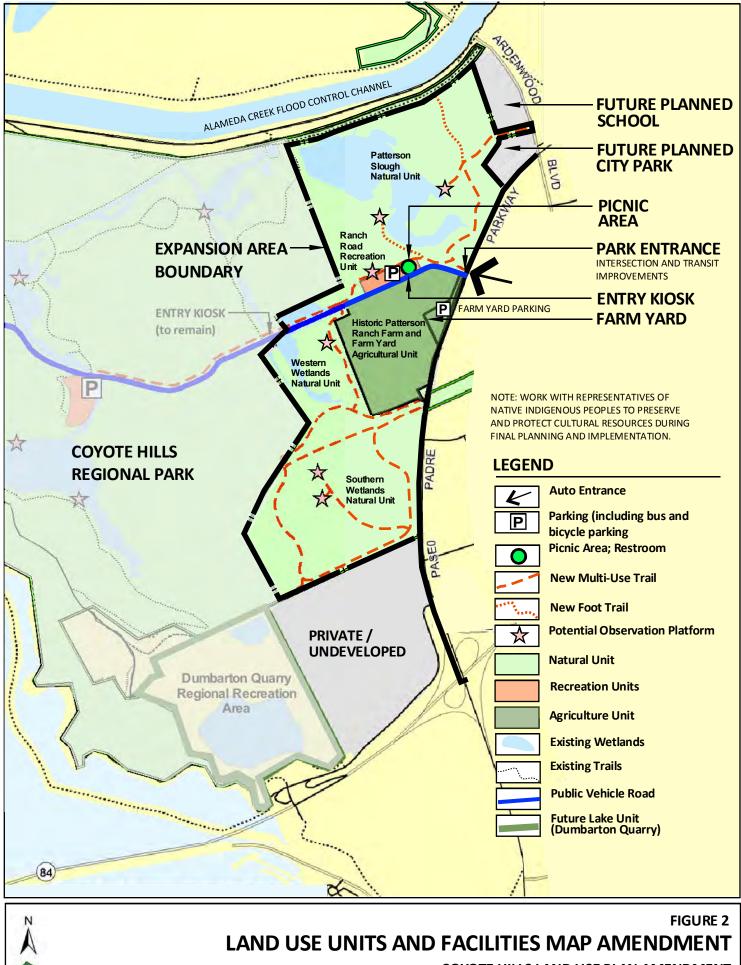
- Ensuring integration of the Expansion area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area.
- Protecting and/or enhancing cultural resources, including providing compatible recreational and interpretive opportunities.
- Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.
- Providing for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resource areas.
- Removing the Contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.
- Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.
- Providing opportunities for urban agriculture.
- Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.
- Developing and managing the Expansion area to be adaptable and sustainable, with awareness of a changing climate that may affect habitat and public access.
- Designing improvements for low maintenance, high durability and to reduce park operating cost, where feasible.
- Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.

A more complete description of Project Goals and Objectives is included in the LUPA.

1.3 Land Use Plan Amendment and Park Development Plan

Land Use Plan Amendment Unit Designations

The Project Area varies across the 306 acres with respect to soil and hydrologic conditions, plant and wildlife habitat, and current use. To create a land use and development plan appropriate for these varied characteristics, the Project Area has been separated into three Land Use designations subdivided into five Planning Units. These are shown in **Figure 2 – Land Use Units and Facilities Map Amendment** and summarized below in **Table 1 - Plan Summary**. Each Planning Unit encompasses a geographic region of similar use and physical and biological conditions. The Planning Units (units) are used in LUPA where they are referred to as the five Land Use Plan Amendment Units. Proposed trails and visitor-serving facilities are also briefly discussed in this section for each unit, and more



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COYOTE HILLS LAND USE PLAN AMENDMENT

DATE: 3-5-19

fully described in the subsequent section on the proposed Park Development Plan.

Land Use Designation	Planning Unit	Acreage
	Patterson Slough	126
Natural	Western Wetlands	29
	Southern Wetlands	99
Agricultural	Historic Patterson Ranch Farm	45
Recreational	Ranch Road Recreation	7
	Total	306

The three land use designations are: Natural Use, Recreational Use, and Agricultural Use. A majority of the Project Area is designated for Natural Use (254 acres). The Natural Use designation includes three of the planning units: Patterson Slough, Western Wetlands, and Southern Wetlands. Development of the three Natural Use Units would consist of habitat restoration and enhancement, flood control and wetlands mitigation, and trail development. The Agricultural Use designation includes the Historic Patterson Ranch Farm Unit, which would continue to be used for agricultural purposes. The Recreational Use designation includes the Ranch Road Recreation Unit that would be used for trails, parking and other Visitor-serving facilities.

The focus of designated Natural Units is on wildlife habitat and native plant community management. Visitorserving facilities such as parking areas, restrooms, and picnic areas occur in Recreation Units. Farming, livestock, and grazing are the principal designated land-uses in Agricultural Units. Included in this designation are areas for repair and storage of farm equipment and machinery, and crop processing and storage, such as hay storage. Also specifically allowed in the Agricultural Units are farm stands for produce sale. Public access trails, small trail head and staging areas, wildlife viewing platforms, and interpretive panels and displays are allowable uses in all Units. The public access trails would also be used for Emergency Vehicle and Maintenance Access (EVMA). Each of the Planning Units, its location, and current and future use as proposed are described below.

Patterson Slough Natural Unit

The Patterson Slough Natural Unit is the northernmost Unit of the Project Area. The Unit covers 126 acres and lies north of Patterson Ranch Road. The Patterson Slough drainage way is in the approximate center of the Unit, flowing slowly northeast through the DUST Marsh to eventually drain to the Alameda Creek Flood Control Channel. A remnant willow-dominated riparian forest containing abundant invasive weeds lines the Slough. This area has known culturally sensitive resources that would be protected during restoration by installing Environmentally Sensitive Area (ESA) fencing around sensitive areas, and by requiring the presence of a qualified Cultural Resource Monitor and representatives of the Ohlone peoples when soil disturbance associated with restoration, demolition, and limited trail construction work occurs in sensitive areas. Restoration and enhancement may include activities such as topsoil grading/tilling, seeding, planting, soil amendment (compost addition) and temporary irrigation, followed by several years of vegetation management, such as flail mowing. These activities would be implemented as needed to exhaust the weed-seed bank in the topsoil, with the revegetation and restoration work establishing areas of willow sausal or willow thicket, mixed riparian forest, oak savanna, seasonal wetlands, and native grasslands. Up to 6,000 to 8,000 native trees and shrubs, including oaks planted as acorns and seedlings, and live cottonwood and willow stakes, would be planted in this area over a proposed three- to five-year implementation period. Other native tree and shrub species obtained from nurseries primarily located in the East Bay including coast live oak (Quercus agrifolia), western sycamore (Platanus racemosa), Fremont cottonwood (Populus fremontii), arroyo willow (Salix lasiolepsis), and box elder (Acer negundo).

Shallow depressions would be created to establish seasonal wetland by either shallow excavations (~1-2 feet) below current grades/elevations, or by importing clean soil to cap over existing grades to establish a more complex topography and support wetland creation. Grassland and oak savanna areas considered too dry for riparian restoration would be mowed and/or grazed for fire fuels management, weed control and agricultural purposes.

A trail system would be constructed connecting the existing Crandall Creek Trail, the San Francisco Bay Trail and the Ranch Road Recreational Unit trails. The new trails would include paved multi-use segments and foot paths, with two spur trails to wildlife observation platforms along the east and west sides of Patterson Slough. The wild-life observation platforms would be setback a minimum of 100 feet from the edge of Patterson Slough in voluntary compliance with City of Fremont Watercourse Protection requirements per Municipal Code Section 18.210.120. As part of a future phase of the project, the Park District would cooperate with the City of Fremont and the Alameda County Flood Control and Water Conservation District (ACFCWCD) in constructing an approximately 550-foot long, 10-foot wide clear span aluminum walkway cantilevered (attached) to the west side of the existing Ardenwood Boulevard Bridge over Alameda Creek. This offsite improvement would significantly enhance pedestrian and bicycle safety for the north-south connection of the San Francisco Bay Trail over Alameda Creek.

Western Wetlands Natural Unit

The Western Wetlands Natural Unit is located south of the Paterson Slough Natural Unit and west of the Historic Patterson Ranch Farm Agricultural and Ranch Road Recreational Units. This 29-acre low-lying area contains a large, depressional wetland that ponds water during the winter rainy period, as well as areas that are slightly saline and sodic (salt- and sodium-affected). Although this area has been previously farmed, which required an agricultural drainage system, that system has since deteriorated and the area is now no longer suitable for farming. The plant cover is mostly invasive weedy species. The plan proposed for this area includes actions such as converting weedy areas to native grassland pasture, and managed/timed flooding of depressional ponded areas in the late summer and fall months to provide a fresh water source for wildlife use. This option depends on the availability of irrigation water from a nearby irrigation line that was once used to flood irrigate fresh water wetlands and seasonal wetlands in Coyote Hills Regional Park to the west. Minor surface grading (~1-2 feet in depth) would be used to enhance and expand seasonal wetland areas. A north-south multi-use connector trail (Harvest Trail) would run on uplands along the east side of this Unit, adjacent to agricultural fields. Native cottonwood and willow trees, similar to the current open stand of these trees to the west, would also be planted.

Southern Wetlands Natural Unit

The Southern Wetlands Natural Unit covers the southernmost land of the Project Area. This 99-acre Unit extends from the Western Wetlands Unit and Line P/Ardenwood Creek to the southern property boundary formed by the levee separating it from adjacent Cargill, Inc., lands. ACFCWCD would oversee the development, monitoring, and management of the flood control and habitat restoration elements of this Unit. This previously farmed and now fallow and ruderal area will be restored to create a mix of riparian, freshwater and seasonal wetlands, saline-alkaline wetlands, and oak savanna. Maintenance access roads would be constructed for the maintenance and monitoring activities required by the ACFCWCD, and would also provide public multi-use trail access. The Park District would be responsible for constructing and/or installing interpretive signage, wildlife observation areas, a short connector trail west of the mitigation area, and a new 80-foot long vehicular clear span bridge over Ardenwood Creek. The Park District would also be responsible for operating, and monitoring public access use within this Unit.

Historic Patterson Ranch Farm and Farm Yard Agricultural Unit

The 45-acre Historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway in this designated Agricultural Unit would continue to be used for small-scale, local agriculture crop production, including field and row crops, pasture and hay lands, and grazing. In addition to agricultural land uses, the Farm Yard portion of the Unit would allow the adaptive re-use of a historic farm building (the Milk House) as a produce stand or other agriculturally related use. This area would also include a small, 20-car parking lot to serve users in this area. Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. New utilities, including domestic water and electric service, would be extended to the existing farm buildings in the Farm Yard area. The Farm Yard entry-road, located south of Patterson Ranch Road and near to Paseo Padre Parkway, would be relocated, the area landscaped, and a new Park Entry sign installed. Connections would also be made to the new San Francisco Bay Trail along the west side of Paseo Padre Parkway, and the Bay Trail would be extended south to the vicinity of Dumbarton Circle and Quarry Road, an additional approximately 1,00 feet. The trail construction work would occur within a

weedy/ruderal area within the City of Fremont Paseo Padre Parkway Road ROW The Park District would cooperate and coordinate with the City in the construction and operation of the trail and any needed Dumbarton Circle-Paseo Padre Parkway intersection improvements.

Ranch Road Recreational Unit

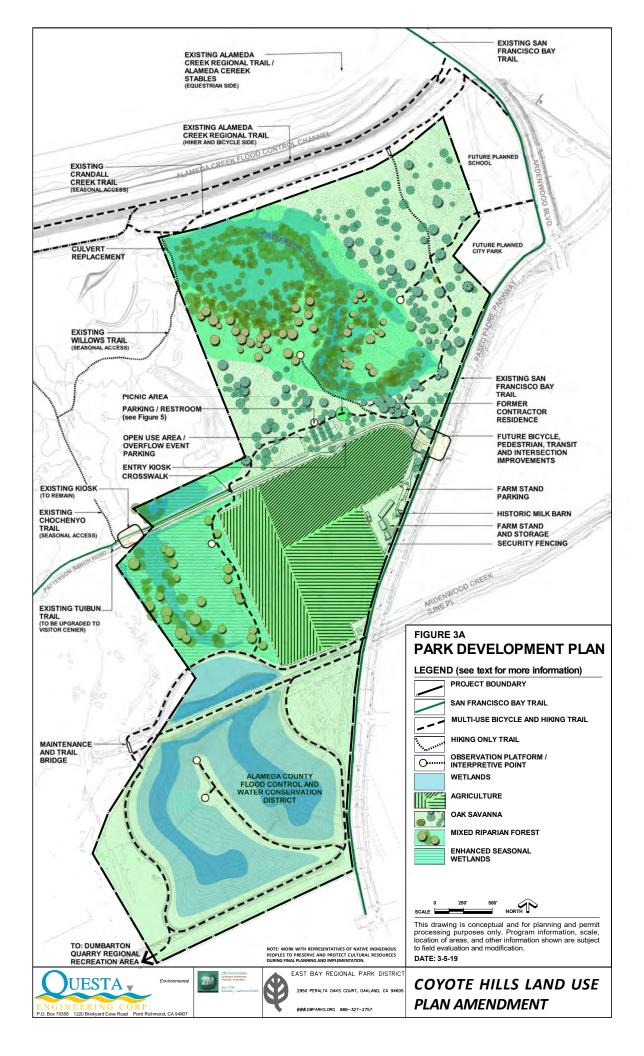
Recreation and visitor-serving facilities are proposed for this approximately 7-acre Recreational Unit, located north of Patterson Ranch Road and immediately west of Paseo Padre Parkway, including an approximately 100-car as-phalt-paved parking lot, a one-acre open-use area, restroom with plumbing, picnic facilities, and a new park entry kiosk. The existing Tuibun Trail, which runs between Paseo Padre Parkway and the existing Visitor Center, a distance of about 1.5 miles, would be relocated to the north of the proposed parking lot and improved in this Unit. New utilities and utility upgrades, including new water service, gas, sewer, and underground electrical and communications cables, would run through this Unit, within or adjacent to the existing road and trail, to the restroom and picnic area. These utilities would also be extended within the Patterson Ranch Road prism to the Visitor Center (see also **Utilities** section).

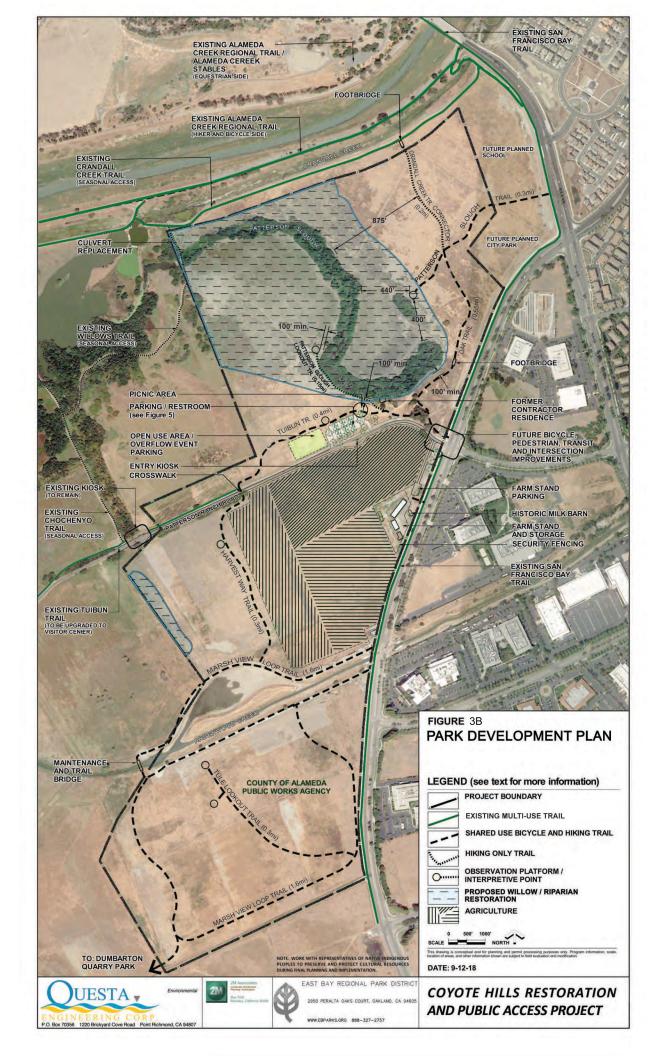
Park Development Plan

- The proposed Park Development Plan has eight main elements:
- 1. Habitat Restoration and Enhancement
- 2. Recreation and Visitor-serving Facilities
- 3. Public Access Trail Construction and Operation
- 4. Cultural Resources Management
- 5. Agricultural Land Uses and Associated Activity
- 6. Surface Water and Groundwater Management
- 7. Utility Upgrades and Extensions
- 8. Climate Change and Sea Level Rise

1. Habitat Restoration and Enhancement

Habitat restoration and enhancement actions would focus on protecting, expanding and enhancing the unique and historical willow sausal (willow thickets), expanding to the east and west the mixed riparian forest along Patterson Slough, and creating ecologically complimentary seasonal wetlands/oak savanna and native grassland areas for wildlife habitat and agricultural grazing adjacent to the Slough in the Patterson Slough Natural Unit. Restoration and enhancement also include creating and enhancing freshwater and saline-alkali seasonal wetlands and willow and cotton wood tree cluster plantings in the Western Wetlands Natural Unit. These land cover types are generally shown in Figure 3A - Park Development Plan and summarized in Table 2. This is a graphic or rendered version of the Plan. Figure 3B presents similar conceptual plan information on a recent aerial photographic base to allow readers to view the location of Proposed Project facilities with respect to landmarks and key features, such as roadways, streams and the Patterson Slough riparian corridor. Key setback distances from the edge of the sensitive Patterson Slough riparian corridor edge are also indicated on this aerial Concept Plan drawing. Target acreages for restoration and enhancement are presented in **Table 2**. These are based on the current understanding of site hydrology and soil conditions and are approximate. Additional soil and hydrologic fieldwork would be completed along with pilot or test plantings to develop a final Restoration Planting Plan, established Irrigation Plans, and postplanting Vegetation and Invasive Species Management Plan prior to full-scale implementation over a three- to fiveyear period. Public access facilities and Trail Plan Implementation would occur during the Year One pilot or planting period.





Land Cover Designation	Possible Range
	(Acres)
Willow sausal and mixed riparian forest, cottonwood-willow grove	50 – 65
Seasonal Wetlands	8 – 12
Oak savanna	25 – 35
Managed and enhanced grasslands and pasture, complex topography	50 - 60
Agriculture, field and row crops	43 - 48
Roads, trails, parking, Farm Yard, and miscellaneous developed areas	5 – 7
Native landscaped areas	8 - 10
Existing willow thickets and mixed riparian forest (to be enhanced and pro-	12
tected)	
Existing freshwater seasonal and saline seasonal wetlands (to be enhanced and	6.5
protected)	
Flood Control Basins, Mitigation freshwater, perennial, seasonal and saline-	92 – 99
alkali wetlands, riparian and savanna	

Table 2: Land Cover Area Acreage Target

Several years of active vegetation management would occur as part of habitat restoration, including pest and weed control, mowing and/or goat grazing, and seasonal irrigation during a 3-year plant establishment period. Other than selective and careful removal of several inches of the surface weed-seed containing topsoil, and replacement with imported soil and compost in some habitat restoration and enhancement areas, the proposed restoration and enhancement program for most areas would be achieved without employing large-scale grading or significantly changing site hydrologic conditions. Grasslands restoration would focus on the most visually prominent areas as seen from Ardenwood Boulevard, Paseo Padre Parkway and Patterson Ranch Road.

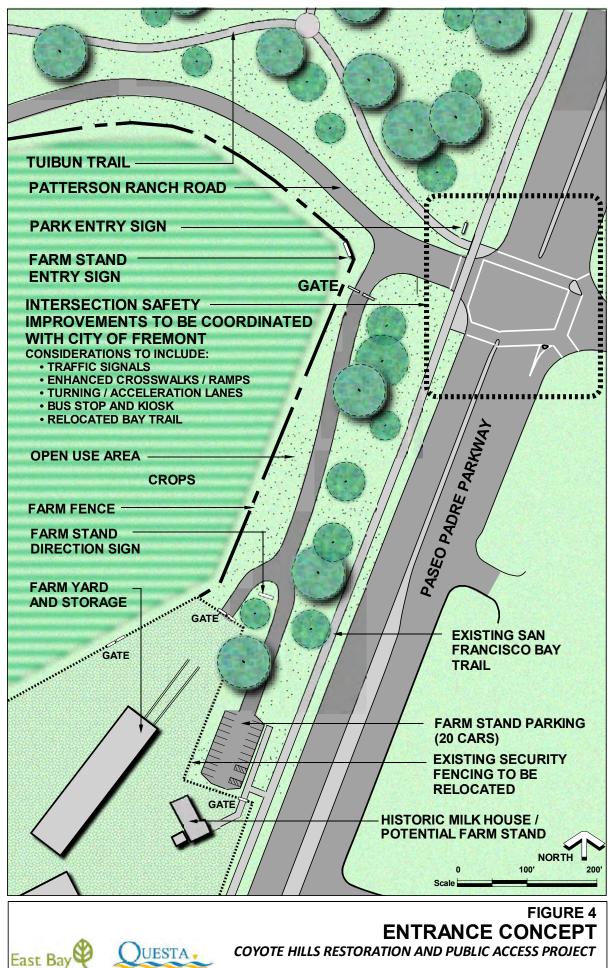
New seasonal wetlands would be created by grading 1- to 2-foot deep, un-drained or depressional basins in the lower lying areas, along the west side of the Park Expansion area.

Existing depressional areas may be unseasonably (late summer to fall) flooded for improved habitat value and bird watching, depending on the availability of irrigation water. This would involve reactivation of an existing irrigation line located immediately west of the Western Wetlands, and connecting it to an existing irrigation well as a source of water. Additional bird roosting areas would be created by planting willow and cottonwood trees in the seasonal wetlands along the west side of the Project, both north and south of Patterson Ranch Road.

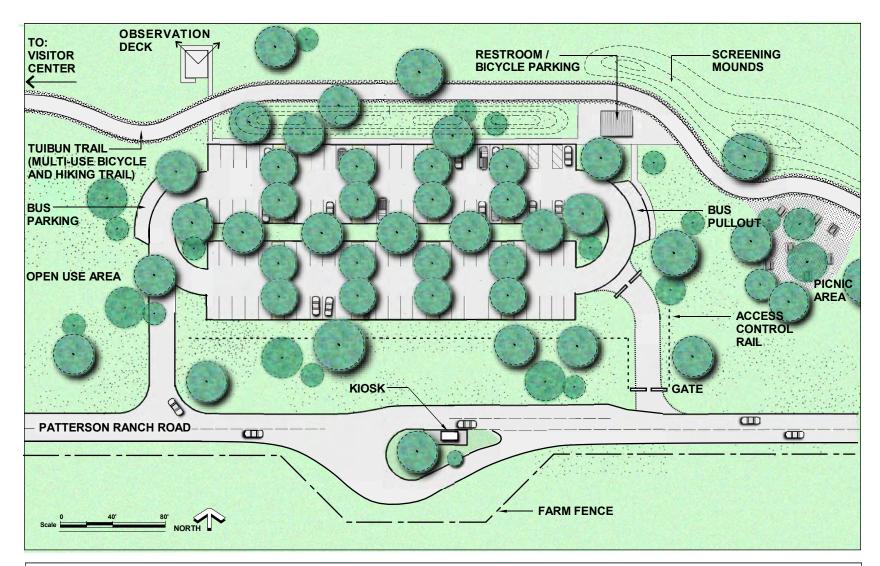
2. Recreation and Visitor-serving Facilities Construction and Operation

Recreation and Visitor-serving Facilities are proposed for the Ranch Road Recreation Unit and the Farm Yard portion of the Historic Patterson Ranch Farm Agricultural Unit. The proposed changes and improvements to the Park Entry and Farm Yard Area, and current Parking Concept, are shown in **Figures 4 - Entrance Concept** and **5 - Parking Concept**, respectively. The final plans for these areas would include the Project elements listed below and within the general facility footprints shown, but the layout and arrangement of the components may vary. Proposed facilities, as shown on the draft Conceptual Site Plan, are summarized in **Table 3 – Summary of Visitor-Serving Facilities**. Park visitors using the new recreation facilities, including trails, would be subject to Park District rules and regulations, as contained in Park District Ordinance 38 (www.ebparks.org/ord38). Normal hours of operation would be dawn to dusk.

Visitor-serving facilities include an approximately 100-car paved parking lot occupying about 1 acre of land, and an approximately 1-acre grassed open-use recreation area available for use by visitors, and to serve as a visual buffer between the Tuibun Trail and Patterson Ranch Road. The open use area would initially be used as interim parking and a restoration staging area, and may also be used for staging Park-related operations and maintenance activi-



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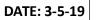
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FIGURE 5

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



ties such as tractor mowing, grazing, mosquito abatement, or overflow parking during special events. Visitorserving facilities also include a new restroom facility with water and flush toilets, potable water, wildlife overlook future picnic area, interpretive elements, and new entry kiosk. Bus and bicycle parking would also be provided. A new Park entry sign, landscape plantings, and fencing would be installed at the Park entry. No park lighting is proposed other than security lights in the Farm Yard area.

The proposed parking lot and picnic facilities are located approximately 150 and 100 feet away (respectively) from the edge of the Patterson Slough Riparian Corridor. These areas would be screened from the Slough by crating low mounds (2 to 4 feet high), landscaped with native trees and shrubs.

Pedestrian and bicycle improvements would be provided within the Project area on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road. These improvements would be constructed in cooperation with the City of Fremont, and could include accessible curb ramps, striping, signage, and traffic calming measures, and a sidewalk or path on the south side of Patterson Ranch Road to connect the existing Bay Trail to a proposed Farm Stand area. Utilities to serve the Visitor Center, including water, electrical and sanitary service may be upgraded or replaced within or adjacent to the existing road and trail.

 100-car parking lot with bus parking (+/- 1 acre) Open use area (+/- 1 acre) Restroom with flush toilets and sinks / drinking fountains with domestic water Picnic area* (+/- 1/2 acre) and other Site Furnishings Up to 12 tables Up to 5 BBQ facilities Up to 10 interpretive panels Up to 10 interpretive panels Up to six wildlife observation platforms (Figure 7-5D) with some interpretive panels in Natural and Recreational Units Fencing G' deer or orchard fencing around agricultural fields Two-rail fencing around front of parking and picnic areas 4' wire field fence around Visitor Serving Facilities, Farm Yard, and portions of Ardenwood Boulevard and Paseo Padre Parkway – Bay Trail 4' straight wire field fencing separating trails from restoration and enhancement areas. These areas would also have "Stay on Trail" signs and "Habitat Restoration – Keep Out" signs 6' security fence around portions of Farm Yard buildings 20-car parking lot in Farm Yard Area Preservation and possible (future) adaptive reuse of historic Milk House building in Farm Yard area Possible new Farm Stand designed to 1930s architecture and using materials salvaged from on-site sources Domestic water, sewer, other utilities within Project Area and extension or utility upgrades to Visitor Center Bus turnout and bus shelter along Paseo Padre Parkway, south of Patterson Ranch Road intersection Approximately 4 miles of new, improved or relocated paved multi-use trail and 0.5 miles unpaved foot trails 	-	
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	13.	Bus turnout and bus shelter along Paseo Padre Parkway, south of Patterson Ranch Road intersection
	14.	Approximately 4 miles of new, improved or relocated paved multi-use trail and 0.5 miles unpaved foot trails

Table 3: Summary of Visitor-Serving Facilities

* No group picnic area provided and no picnic area reservations would be taken.

Parking

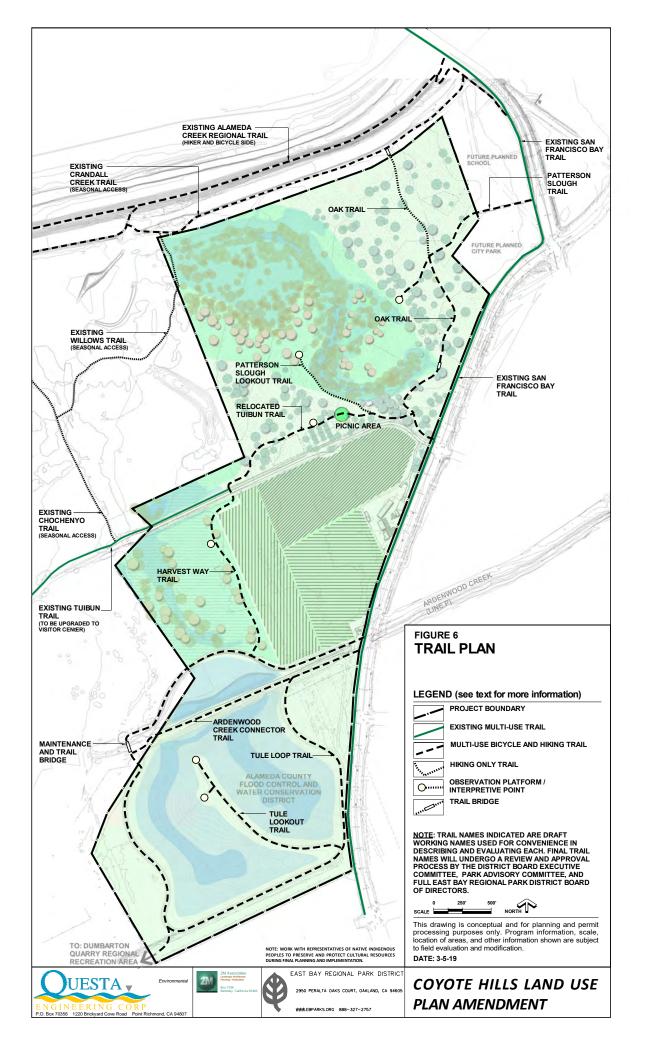
The Project Plan calls for reconfiguring and relocating existing vehicle parking within the Project area and immediately adjacent areas of Coyote Hills Regional Park, including new parking at a 100-car paved parking lot on the north side of Patterson Ranch Road located approximately 1,000 feet west of the Paseo Padre intersection. Additional overflow/event parking will also be provided on an adjacent upland area. The open use grassy area could potentially be used for up to 100 vehicles for overflow parking during special events.

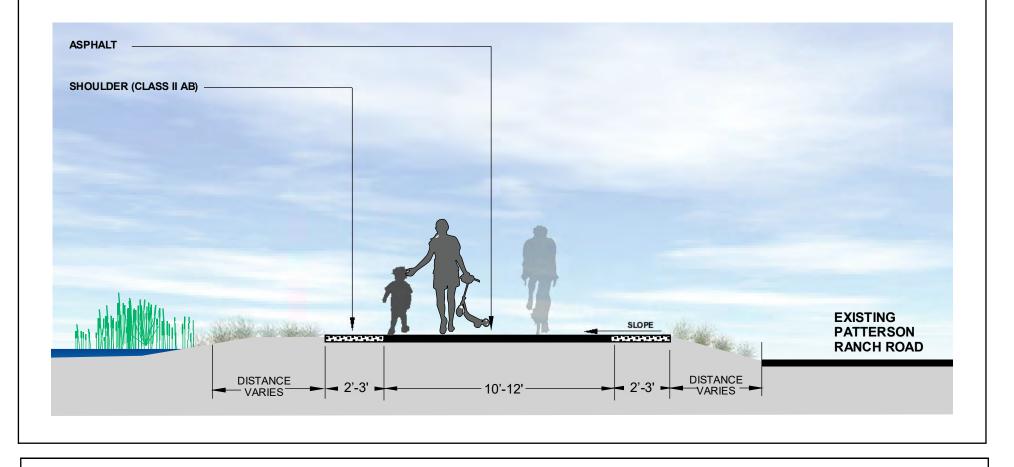
3. Public Access Trail Construction and Operation

Approximately 4 miles of new, improved and relocated trails are planned for the Park Expansion Project area, with a continuous north-south multi-use trail that traverses the entire area, including the proposed Oak Trail, Patterson Slough Trail (utilizing an easement to connect to Ardenwood Boulevard), Harvest Way Trail (west of the farm lands), and Tule Trail segments (in the ACFCWCD southern area). The trail system would provide connections to the San Francisco Bay Trail along Paseo Padre Parkway and Ardenwood Boulevard, and to existing trails within the adjacent Regional Park (Figure 6 – Trail Plan and Table 5 -Trail Summary).

Three types of trails are planned: 1) multi-use bicycle and hiking trails (**Figure 7A**); 2) natural surface hiking trails (**Figure 7B**); and 3) improved flood control maintenance access roads to be used for trials in the Southern Wetlands Unit (**Figure 7C**). The ACFCWCD maintenance roads would also be used for Park maintenance activities and for mosquito control access, in addition to being proposed for multi-use trail usage.

The natural surface foot trails (approximately 0.5 miles total) may be 6 to 8 feet wide, with minimal improvements, and designated for pedestrian use only (no bicycles allowed). Portions of these pedestrian trails may not be fully accessible during periods of heavy rain due to soft soils and/or ponded/flooded conditions. Some foot trails in non-wetland areas may be elevated up to 6 to 8 inches above grade with aggregate base or gravel, and constructed with small diameter culverts or other drainage crossing structures, such as puncheon footbridges, or drainage lenses. Pedestrian-only trails are planned within the more sensitive portions of the Natural Units. The Patterson Slough Lookout Trail is located on an existing dirt farm road with the wildlife observation platform located in the former and now demolished farm worker housing area, as shown on **Figure 6 – Trail Plan. Figure 8** shows the envisioned wildlife observation platforms. Some trails including the Patterson Slough lookout spur may be subject to seasonal closure.





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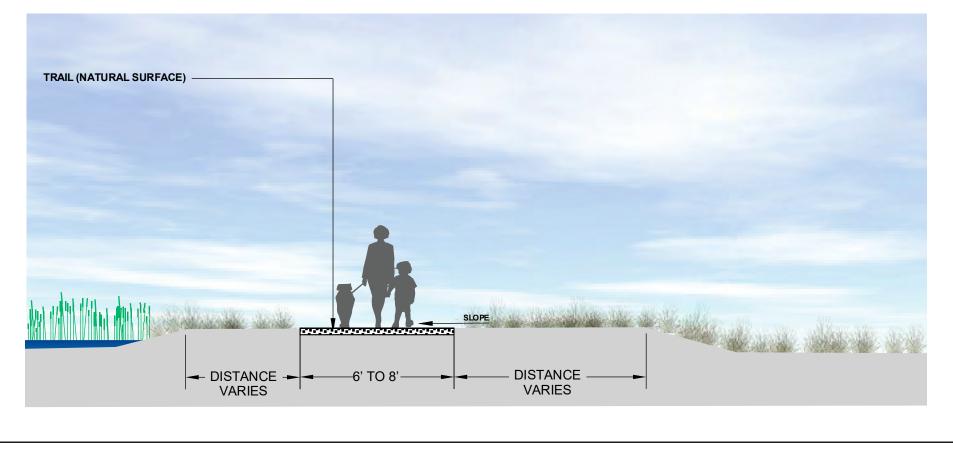
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Regional Park District

FIGURE 7A SECTION: MULTI-USE BICYCLE AND HIKING TRAIL

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

DATE: 2-19-19





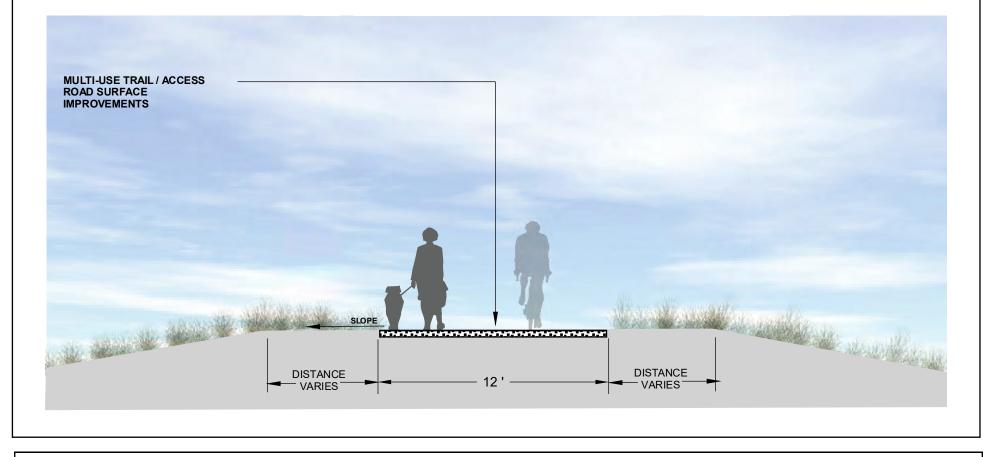
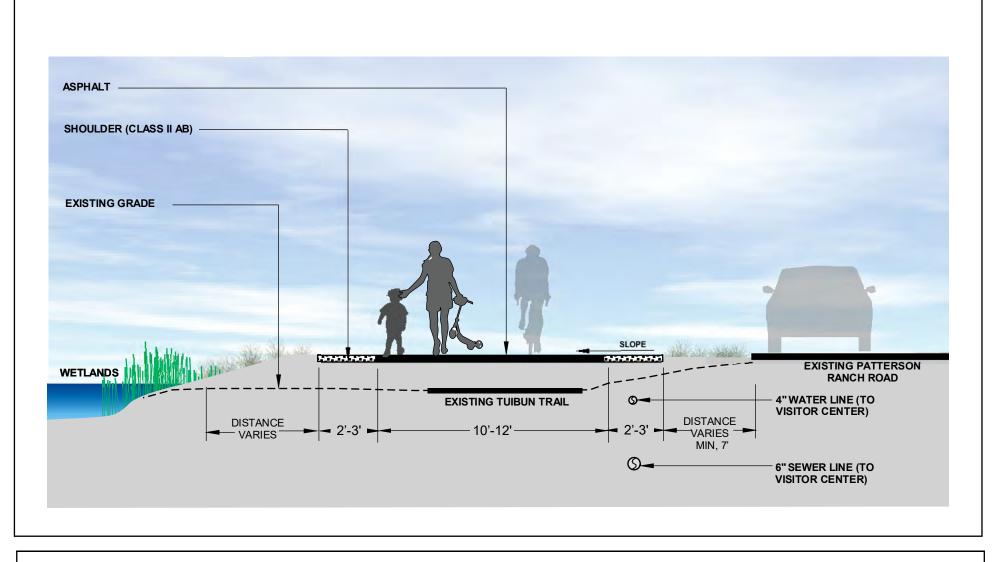


FIGURE 7C SECTION: SOUTHERN WETLANDS

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT





UESTA

ENGINEERING CORP

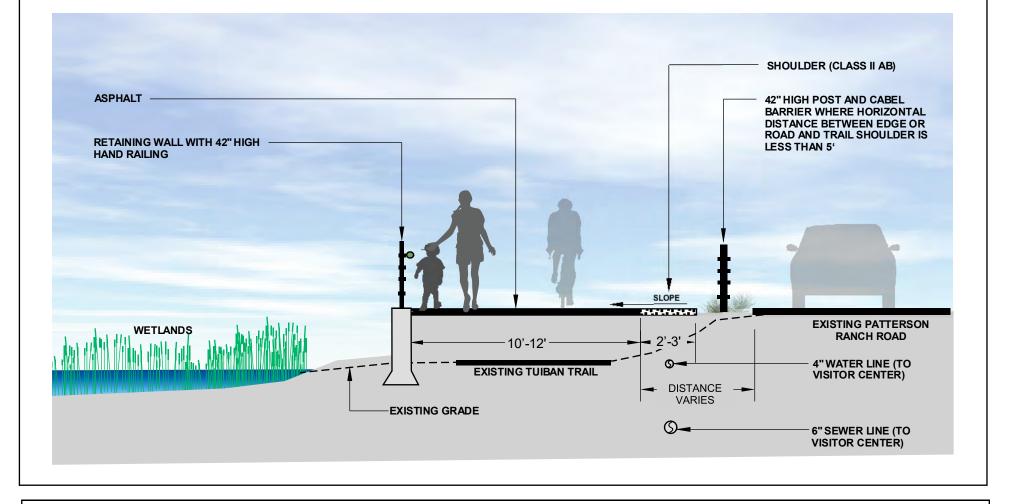
East Bay

Regional Park District

FIGURE 7D

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



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ENGINEERING CORP.

East Bay

Regional Park District

FIGURE 7E

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

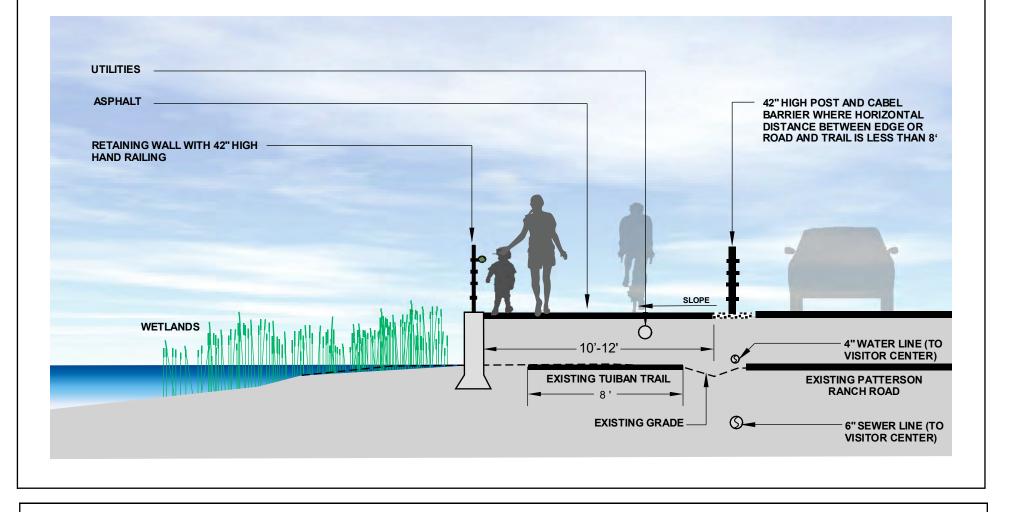
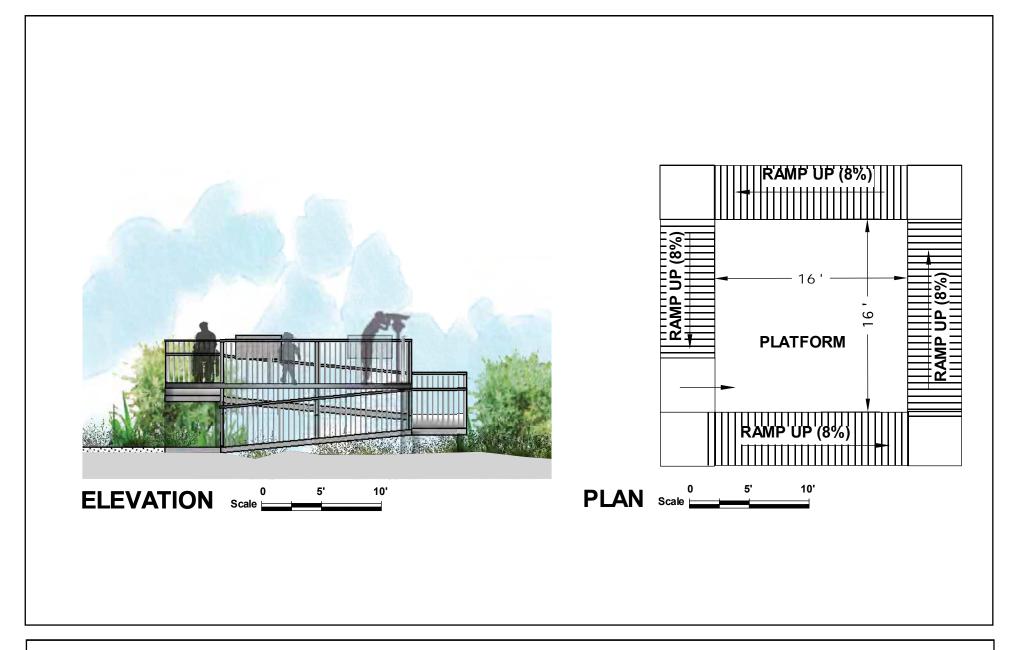


FIGURE 7F

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT





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Regional Park District

FIGURE 8 DRAFT OBSERVATION PLATFORM

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

DATE: 9-12-18

Working Trail Name and Key Attributes	Multi-Use Trail (miles)	Foot Trail (miles)
Willows Trail, including minor repair and eleva- tion		0.05 (existing)
Crandall Creek Trail		0.05 (existing)
Oak Trail	0.35	0.2
Patterson Slough Trail	0.30	
Patterson Slough Lookout Trail		0.15
Tuibun Trail	0.40 (relocated)	
Tuibun Visitor Center Trail improvements, in- cluding widening and elevation	1.1 (existing)*	
Harvest Way Trail	0.30	
Tule Loop Trail, including connection to new Dumbarton Quarry Regional Recreation Area	1.60	
Ardenwood Creek Connector, including 80' pe- destrian/vehicular bridge	0.40	
Tule Lookout Trail	0.30	
Total	3.65*	0.45

Table 4: Trail Summary

* Total does not include 1.1 miles of proposed Tuibun Trail improvement west of the Park Expansion Project Area.

The multi-use trails should be fully improved with a 10-foot to 12-foot paved width, designed for all weather use, fully accessible and compliant with Americans with Disabilities Act (ADA). They could have 2- to 3-foot-wide soft, stabilized fine-aggregate or gravel shoulders on both sides of the pathway. The maintenance access roads in the Southern Wetlands Natural Unit would require minimal public access improvements, such as gravel surfacing, signage, and benches. Bicyclists will be permitted on these multi-use trails. Some sections of the Southern Wetland Natural Unit may be paved with asphalt concrete where regional trail connections pass through the area.

The planned trails include approximately 0.4 miles of new natural surface hiking trails, and approximately 3.5 miles of new multi-use trails. Approximately 1 mile of improvements to the existing Tuibun Trail west of the Project Area, and approximately 0.2 miles of existing foot paths requiring minor maintenance and repair are also included in the Project.

Trail Connections

The proposed trail system includes connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, a new connection to the existing Crandall Creek Trail (along the south side of the Alameda Creek Flood Control Channel), providing a new bridge between the Crandall Creek Trail and DUST Trail, improving the Tuibun Trail to the Visitor Center and providing a link to camping opportunities at the future Area Dumbarton Quarry Regional Recreation Area (former Dumbarton Quarry), near and west of the southern end of the Project site. The proposed Trail Plan would also facilitate connections to the City of Fremont planned trails, including the Dumbarton Bridge to Quarry Park Trail along Quarry Road, to the south of the Project area. In addition, maintenance access roads in the southern part of the Project Area would be improved to form a loop trail system around the mitigation wetlands and along Ardenwood Creek, with wildlife observation platforms on a spur near the center of this Unit. Portions of Patterson Slough would be accessible to Park staff, researchers, occasional visitors on guided tours, and mosquito and vector control technicians. In addition to habitat restoration, a multi-use trail would be provided on the east side of Patterson Slough, connecting to the Bay Trail along Ardenwood Boulevard. This trail connection would also provide an opportunity to connect to the planned school and community park east of the Expansion area.

The existing Tuibun Trail, currently located on the immediate north side of Patterson Ranch Road, would be relocated to the north side of the new parking lot, and repaved or rebuilt in other areas. Since the Tuibun Trail is substandard due to trail width, elevation, and experiences seasonal closure due to flooding/ponding, it would be improved to a consistent standard to facilitate increased all season use to the existing Visitor Center, a distance of about 1.1 miles. Fill placement for trail elevation and upgrading in areas adjacent to wetlands along Patterson Ranch Road and the existing Tuibun Trail would use retaining walls or other structures placed at the edge of the existing trail and backfilling within the wall structures to elevate the trail section (**see Figure 7D, 7E, 7F**). Boardwalk segments may be constructed in some areas. These would be designed to clear-span any low, persistently wet areas within or near the existing trail footprint where trail width and elevation improvements cannot be achieved by use of low retaining walls. Helical piers, pin piers, or other innovative foundation structures would also be used to support any needed boardwalk segments and minimize ground disturbance. Low areas of Patterson Ranch Road that are subject to ponding would also be elevated within the existing roadway footprint, and utility upgrades would be made from Paseo Padre Parkway to the Visitor Center.

Wildlife Observation Platform

Public access features such as wildlife observation platforms (**Figure 8**) or overlooks would be at grade or placed on fill in non-wetland areas, or on elevated decks with ADA compliant ramps. The wildlife observation platforms would use wood or composite materials, be 15 to 25 feet in length and width, and elevated 5 to 8 feet above adjacent grade on surface placed concrete pier blocks or pin piers. This would minimize soil disturbance and potential damage to any below-ground cultural resources. The wildlife observation platforms would be placed a minimum of 30 feet from the edge of Patterson Slough, with installation of fencing and native landscaping to provide physical and visual barriers and screening, in voluntary compliance with the City of Fremont Watercourse (stream) setback protection ordinance.

Alameda Creek Bicycle/Pedestrian Bridge

Currently, the existing San Francisco Bay Trail runs along Union City Boulevard in Union City and crosses Alameda Creek to Fremont via the 550-foot-long Ardenwood Boulevard vehicular bridge, and continues south along Ardenwood Boulevard and Paseo Padre Parkway past the south end of the Park Expansion area. There are currently no designated bicycle lanes on the bridge, with a 5-foot-wide sidewalk on the east side of the bridge. Earthen ramps are provided under the bridge on the north and south ends to allow pedestrian access to the bridge sidewalk from the west side. One alternative for crossing of Alameda Creek and to further improve the Bay Trail and bicycle commuter access that may be constructed as part of the Proposed Project, or by/or in cooperation with another local government entity, is retrofitting the existing bridge with a cantilevered pedestrian/bicycle lane on its west side. Pending further structural evaluation of the existing bridge, this could be accomplished for instance by attaching the cantilever beams and other structures to the existing bridge piers, with no new in-channel or channel bottom fill structures requiring placement of new piers within Waters of the US, or wetland areas. The bottom of the cantilever structure would match the bottom cord elevation of the existing bridge to avoid flood flow obstruction. In addition to the cantilever bridge structure, approach ramps and modifications to the existing Alameda Creek channel levee top and Crandall Creek levee system would connect the new cantilever bridge pathway to the existing westbound and eastbound Alameda Creek Trail and the Bay Trail. As noted above, the Alameda Creek Trail in this area ramps down and under the Ardenwood Boulevard Bridge, and the new trail ramp structures would be designed to accommodate this route, including on the north side and on the south side, where the existing levee top is lower in elevation.

4. Cultural Resources Management

Construction of public access and visitor-serving facilities would be designed to minimize excavation to the first several inches associated with clearing and grubbing activities. Most facilities, such as the parking lot, restrooms, and multi-use trails would involve fill importation and placement in non-wetland areas, not excavation. Elevated structures, such as observation platforms, wall footings, and short boardwalk segments along the improved Tuibun Trail would be founded on concrete foundation blocks or pin piers to minimize site and subsurface disturbance.

Trenching for new utility installation and utility up-roads to the Visitor Center, would be to a typical depth of 3 to 4 feet, and a maximum depth of 6 to 7 feet. Most utilities would be located within existing roadway fill. Shallow 1- to

2-foot depressions would be excavated to create seasonal wetlands. Work involving excavation that could potentially impact cultural resources would be carefully conducted under the observation of a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people, to avoid or minimize possible disturbance of buried cultural resources, and to initiate appropriate management actions if buried artifacts or human remains are uncovered.

There are two structures within the Project area that are eligible for listing on the California Register of Historic Structures: 1) the Farm Labor Contractors Residence located immediately adjacent to the upper portion of Patterson Slough, and 2) the Milk House building in the Patterson Ranch Farm Yard area, southwest of the intersection of Patterson Ranch Road and Paseo Padre Parkway. (Please see **Park Development Plan, Figures 3A and 3B** for historic building locations).

The Farm Labor Contractors Residence is in overall fair to poor condition. The framing and foundation are in fair condition, but the exterior siding, roofing, flooring, windows, doors, interior walls and fixtures are in poor to very poor condition. Removal of the Farm Labor Contractors Residence is proposed because it is located immediately adjacent to willow-lined upper Patterson Slough in an area of high biological and cultural resources sensitivity. Because restoring and rehabilitating, or moving the building by elevating it on blocks and wheels (to relocate it) may result in damages to these resources, this structure would be carefully dismantled and materials salvaged to be available for reuse as an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

The Milk House building is in overall good condition and would be preserved in place. The Milk House building is being considered over a longer period for architectural restoration or adaptive re-use such as a possible farm produce stand or other compatible Park supporting uses. In the interim it would be protected from deterioration and weather damage as part of this Project. For architectural restoration or adaptive re-use, improvements would consist primarily of interior renovation, but also would include installation of utilities such as electricity and domestic water. Improvements to historic buildings would be made consistent with the U.S. Department of the Interior, National Park Service *Historic Preservation Standards and Guidelines*. Farm Yard area improvements in this culturally resource-sensitive area would include 1 to 2 feet of fill placement needed for constructing an approximately 20-car parking area for Farm Stand visitors, fencing with driven fence posts to separate the Milk House from the storage and shop buildings that would continue to be used by the Farm operator and Park District maintenance staff, and landscape and entry area improvements, and a new Park Entry sign. All of these construction activities would have a Cultural Resource Monitor present.

5. Agricultural Land Uses and Associated Activities

The historic Patterson Ranch farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway would continue to be used for agriculture, and are designated as the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit in the LUPA. Small-scale and local agricultural crop production by a Farm lessee would focus on use of Climate Smart farming practices and may provide local organic produce for sale at the historic Farm Yard. Climate Smart agriculture includes actions such as addition of compost to fields to facilitate carbon sequestration, low levels of tillage, and careful and efficient management of crop residues, fertilizers, organic pesticides, and irrigation water. Some of these uses may be conducted as part of a demonstration or pilot study with an environmental education/interpretive component.

In addition to farming in the Agricultural Unit, mowing for hay production and grazing would be allowable uses in the Patterson Slough, oak savanna and grasslands and the Western Wetlands areas; but not within seasonal wetlands, willow sausal or mixed riparian forest areas.

Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. Other farm use-related improvements proposed for this area may include extension of utilities to serve the complex, including a new 1" domestic water line to serve the building, sewer, electricity/gas, and construction of a 20-vehicle parking area occupying about 1/3 acre of land, to serve the Farm Stand. Existing fencing may be modified to improve site management and security and enhance the visual character of the area. New deer fencing would also be installed in the agricultural area to minimize deer browse damage.

6. Surface Water and Groundwater Management

As an important element of the Project, the Park District would continue to coordinate and cooperate with its partner local agencies in protecting, monitoring, and managing the surface water and groundwater resources within Coyote Hills Regional Park, including within the Park Expansion area. The partner agencies and areas of cooperative and shared water management responsibility include:

- Alameda County Flood Control and Water Conservation District (ACFCWCD) Flood control and water quality management of Line P/Ardenwood Creek and Line K/Crandall Creek
- Alameda County Water District (ACWD) Groundwater management, including monitoring and management of shallow zone salinity, and agricultural and habitat restoration irrigation wells
- Alameda County Mosquito Abatement District (ACMAD) Management of mosquitoes and other potential disease vectors in ponded areas, especially along and within Patterson Slough and west of the Project area
- Alameda County Environmental Health (ACEH) Water quality of domestic water wells and onsite wastewater disposal systems regulation
- Alameda County Resource Management District (ARCD) Assistance in management of agricultural operations, including soil and water quality issues associated with farming, grazing, and habitat restoration
- City of Fremont (City) Department of Engineering and Planning Management of stormwater runoff, grading and erosion control, hazardous materials/waste management, and flood plain regulation

General Project activities include facilitation of access to surface water bodies for monitoring and management, as well as providing continuing access to monitoring wells and irrigation wells, and sharing monitoring information collected by the Park District Staff.

Specific Project activities described in more detail below include:

- ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area (WMA) Project
- Stormwater control facilities, including parking lot bioswales and rain gardens
- Abandoned well location and destruction
- Abandoned septic tank location and destruction
- Low level pesticide residue evaluation and as-needed remediation and removal

Southern Wetlands Natural Unit-Phase 1 Flood Control and Wetland Mitigation Project

The ACFCWCD Project includes constructing a Flood Control and Wetlands/Habitat Mitigation and Public Access component covering approximately 50 acres that is located south of Line P/Ardenwood Creek, within the Southern Wetlands Natural Unit.

The Park District will continue to coordinate this work with ACFCWCD, who would be the lead agency responsible for this construction and operation. This work is a continuation of Phase I of the ACFCWCD Flood Control Zone 5 Line P Project. The Line P Phase 1 Project was completed in the fall of 2017 and involved making channel flood flow conveyance improvements (channel widening and deepening to original design grades) to Ardenwood Creek, from upstream beginning at Tupelo Street to approximately 2,200 feet downstream of Paseo Padre Parkway west of the Park Expansion area. Phase 2 of the Project involves making channel conveyance improvements along Line P through the existing Coyote Hills Regional Park "J-Pond" area, to its outlet at the tide gate discharge culverts in the Alameda Creek south levee, north of the Visitor Center. Phase 2 is a separate project and is not addressed in this CEQA document.

The Phase I continuation work involves grading two, 3- to 4-foot-deep off-channel basins that will be connected to Ardenwood Creek via two culvert crossing structures for inlet and outlet flow controls. Each crossing consists of four 48" diameter reinforced concrete pipes, with sluice gate control at one of the four pipe barrels at the outlet structure. The two basins will occupy about 30 acres, as measured at their rim elevations. The basins will serve as temporary floodwater detention structures during periods of high flow in Line P/Ardenwood Creek.

The basins will be planted and seeded using a mix of native seasonal wetlands and emergent marsh species, including species that are saline-alkali tolerant. The created wetlands will provide mitigation credits for other ACFCWCD flood control and channel maintenance projects and operations in Zone 5, including maintenance projects along Alameda Creek. Some of the graded earthen material will be relocated within the 50-acre parcel to create oak savanna uplands, with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. The Flood Control and Wetlands Habitat Mitigation project is shown conceptually on **Figures 3A and 3B, Park Development Plan**.

The maintenance roads would be available to the Park District and ACFCWCD to improve, maintain, and operate as multi-use trails. This mitigation area would be improved and maintained over an initial 7- to 10-year period, during which it will be operated and managed by the ACFCWCD as a Wetlands / Habitat Mitigation Bank. Following successful establishment of the Mitigation Bank, including its created wetlands and enhanced habitat, and its demonstrated success in being self-sustaining and meeting all Mitigation Bank establishment criteria, and after all the Mitigation Bank credits have been used, the area would be turned back over to the Park District for full integration and management as part of Coyote Hills Regional Park.

Project Area Stormwater Control Facilities

Construction of the Open Use area and 100-car parking lot, restroom, and picnic area facilities in the Ranch Road Recreation Unit would also include the grading of bioswales (broad-bottomed shallow and vegetated drainageways) and rain garden facilities to capture and treat stormwater runoff prior to release to the west side of the Patterson Slough mixed riparian/willow restoration area. Grading volumes are estimated to be 200 to 300 cubic yards of earthwork with maximum cut depths of 2 feet below existing grade. All stormwater runoff design and construction work would be completed consistent with City of Fremont Municipal Code section 18.210.110, "Development design requirements (stormwater)".

Destruction of Abandoned Wells

There are eight known or suspected abandoned and non-functioning wells within the Park Expansion area, or immediately adjacent to it. Some of the abandoned wells have no surface infrastructure, such as a standpipe or pump, and are difficult to locate in the field. Their approximate locations are based on ACWD records. As part of final engineering, and during construction and associated construction management, the Park District would coordinate with ACWD to confirm the location of abandoned wells, identify any previously unknown abandoned wells, and develop and implement plans to destroy these abandoned wells following applicable ACWD permitting regulations and destruction guidelines. This would involve pulling well pumps and casings and any aboveground stand pipes and grouting the wells closed.

Abandon and Destroy Septic Tanks and Leachfields

The historic Contractors Farm House and the now demolished Farm Labor Housing buildings were located in rural, unincorporated Alameda County when they were built. They had septic tanks and leachfield wastewater disposal systems. Per Alameda County Onsite Wastewater Treatment System Code, Section 9, these abandoned systems would be field-located, and if found, destroyed. This would involve removing the septic tank lid, pumping the tank chambers, perforating the tank bottom, and backfilling the tank with pea gravel or drain rock and topsoiling. Leach lines would not be removed. This would be done under a County-issued permit.

Low-Level Residual Pesticide Contaminated Soil Remediation

Portions of the Project Area may contain surface soils with low levels of residual pesticide compounds, which are a

relic from when this area was intensively farmed. Based on the results of previous testing, residual levels are such that they do not create a health risk to construction workers, Park staff, Park visitors, or nearby businesses or residences, but could have potential ecological food chain effects through uptake of soil-borne insects in wetland areas. Follow-up sampling and testing would be completed in areas where new seasonal wetlands are proposed. Depending on the findings, shallow soil excavation and removal, and transport of the soil to an approved facility permitted to accept the soil would be completed. The removed soil may be treated as a non-regulated or non-hazardous waste material.

7. Utility Upgrades and Extension

Domestic Water

Currently there is no potable water service to the Project Area. The Visitor Center is served via a 3-inch water line that crosses diagonally from Paseo Padre Parkway in the vicinity of Kaiser Avenue through the fields north of Ardenwood Creek to Patterson Ranch Road in the vicinity of the existing kiosk where it runs up the road to the Center. This system is considered unreliable and under-sized, especially for fire control purposes. The Proposed Project would include a new 6-inch water line from the ACWD water main along Paseo Padre Parkway, up the north side of Patterson Ranch Road, to the Visitor Center, a distance of about 8,000 linear feet (LF). A new 2- inch lateral water line would run to a proposed new restroom facility to the north, and to the proposed picnic area, a distance of about 1,500 to 1,600 LF from the Paseo Padre Boulevard point of connection.

A new 2-inch potable water line would also be installed within the Farm Yard parking area to serve the existing Milk House building, about 500 - 600 LF. The water lines would be in 2 to -3-foot wide by 3- to 4-foot-deep utility trenches compliant with City of Fremont and ACWD standards.

Irrigation Water

Temporary irrigation, including provision of a temporary irrigation water source and supply, storage, and irrigation distribution system, would be provided as part of the Project to aid in the establishment of native trees and shrubs within the mixed riparian and oak savanna restoration areas. Approximately 6,000 to 8,000 trees may be planted over a three- to five-year period, including live willow stake planting in the willow sausal restoration area. The planted native trees would require seasonal irrigation during a two- to three-year plant establishment period. Total annual irrigation volumes are estimated to be about 3.0 to 4.0 acre-feet of water. Tree planting would be staggered over a 3-year period, so actual annual use may be less than this.

Sources of irrigation water that might be used include either the existing farm irrigation well in the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit and/or repairing and using an existing well located in northeast corner of the Patterson Slough Natural Unit, or using available reclaimed or domestic water.

Wastewater

The current wastewater system consists of a 4-inch diameter sanitary sewer force main that runs about 8,000 feet along Patterson Ranch Road from the Union Sanitary District (USD) sewer main along Paseo Padre Parkway to the Coyote Hills Regional Park Visitor Center. The wastewater system includes a lift station that is located below the Visitor Center. This wastewater system would be reconstructed within Patterson Ranch Road, upgrading to a 6-inch line with a new pump station.

A new, 2- or 3-inch diameter pressurized wastewater pipeline would be installed parallel and adjacent to the reconstructed force main to serve the restroom building in the Project Area. This is a distance of about 1,400 - 1,500 LF from the USD Paseo Padre Parkway sanitary sewer main. The restroom wastewater system would include a duplex (backup) pump station. The sewer line would also be located within a utility trench compliant with City of Fremont and applicable USD codes and standards, typically 3 feet wide and 5 feet deep along much of Patterson Ranch Road, but possibly up to 6 or 7 feet in depth near Paseo Padre Boulevard. Since the Park Expansion area is not currently within the USD service area, approval would also be needed from the Alameda County Local Agency Formation Commission (LAFCO).

Other Utilities

Other "dry" utilities that would be installed within and above the water line in the joint trench per City code would include: a) 2" gas line, b) two 4" telecommunications conduits, c) 4" electrical conduit, and d) 2" fire signal conduit. These would also run from the vicinity of Paseo Padre to the Visitor Center, with select laterals (electric service) to the proposed restroom facility.

8. Climate Change and Sea Level Rise Adaptation

There are four objectives that would be implemented in the LUPA and Park Development Plan regarding climate change adaptation:

- 1) Ensuring that existing and proposed improvements are resilient to changing climate, including sea level rise, rising ground water tables, potential soil and groundwater salinization, and increased flood risk to in-frastructure.
- 2) Ensuring that District activities occurring within the expansion plan area, consistent with the overall Coyote Hills Regional Park, are appropriate management actions to reduce Park contributions of greenhouse gases and other climate changing actions, and proactively taking actions that trap or sequester atmospheric carbon.
- 3) Providing opportunities to educate Park visitors about climate change, as well as cooperating with climate change scientists to make parklands available for research and demonstration projects.
- 4) Providing opportunities for active transportation to, from and within the Park by constructing facilities for bicycle and pedestrian use, as well as accommodating transit where appropriate.

Site program components that address climate adaptation include Climate Smart farming activities, as well as the proposed program of riparian and oak savanna tree planting for carbon fixing or carbon sequestration. Other opportunities include planning for installation of electric vehicle charging stations in the parking lot, should the Park District develop a pilot program in the future.

Climate Smart management and adaption also involves constructing facilities and improvements to elevations above those subject to flooding and ponding, as well as developing improvement and restoration plans that are cognizant of and adaptive to expected increases in shallow zone groundwater levels, increased areas of pond-ing/flooding and poor drainage, and potentially increased soil and water salinity and sodium levels. The plant palette would include local, native plant species that are site appropriate and tolerant plant materials capable of thriving under changing site conditions.

A proposed robust, science-based soil and surface and groundwater monitoring program would aid in climate change adaptive management decision-making. Baseline conditions were documented during the Project site investigations and would form the basis of the proposed long-term monitoring program. Smart, wireless and web-based agricultural sensors may be used to remotely monitor organic matter (soil carbon), moisture, soil oxygen, salinity, pH, and other important soil and hydrologic properties, and the record keeping and database would provide the information needed to support adaptive management decision-making.

9. Visitor-serving Facilities and Trail Grading and Disturbance

Preliminary estimates of grading, trenching and fill quantities are provided in this section. Quantities and measurements are approximate. Exact Visitor-Serving facility footprints and exact trail lengths, widths, and fill depths would be determined during future Park Design Development with some Plan elements, such as building, grading, and stormwater management, subject to review and approval by the City of Fremont. A range of lengths, widths and fill thickness was used to bracket and quantify potential disturbance areas associated with Proposed Project features, along with a range of expected fill volumes.

Construction of trails, parking areas, and visitor facilities, and installation or upgrading of utilities, would involve

clearing and grubbing 2 to 3 inches of topsoil, grading, trenching and local cut or imported fill placement and compaction. Fill depths would typically not exceed 4 feet with most cuts (except utility trenches) limited to 2 feet.

Construction of visitor-serving facilities (farm yard area, picnic area, restrooms, and parking) would disturb between 141,000 and 171,000 square feet, and place between approximately 6,200 (0.15 acres) and 12,500 (0.30 acres) cubic yards of fill to a maximum depth of 4 feet. Construction of new trails and repair, re-construction, or relocation of existing trails would disturb between approximately 310,900 and 366,600 square feet (7.1 to 8.4 acres), and place between 13,000 and 20,400 cubic yards of fill to a maximum depth of 3.0 feet. Trenches for utility installation would be approximately 9,000 to 9,800 feet in length, and have a maximum depth of 6-feet. For the Project, total fill volume associated with parking, trails and visitor-serving facilities would be in the range of about 19,500 to 33,000 cubic yards. Total disturbance, if all Project Trail and Visitor-serving features were constructed at the same time, would be between approximately 452,000 sq. ft. (10.3 acres) and 537,600 sq. ft. (12.3 acres). **Tables 5** and **6** summarize fill and disturbance associated with Trails and Visitor-serving Facilities.

Working Area Name	Feature Size (SF)	Fill Depth (ft.)	Fill Volume (CY)
1. Parking Area and Restroom	48,000 - 62,000	1.5-2.5	2,700-5,700
2. Picnic Area	18,000 - 23,000	1.0-2.0	700-1,700
3. Overflow Parking	43,000 -47,000	1.0-2.0	1,600-3,500
4. Farm Yard Parking and Road	23,000 -27,000	1.0-1.5	850-1,500
5. Other Farm Yard Use Areas	9,000 - 12,000	1.0-1.5	350670
Total	141,000-171,000	N/A	6,200-12,500-

Table 5: Visitor Serving Facilities -Disturbance and Fill Summary

Working Trail Name	A Trail Length (LF)	B Fill Width (ft.)	C Fill Depth (ft.)	D Fill Disturb- ance (SF)	E Fill Vol- ume (CY)
Willows Trail (existing foot) ^{*1}	600	7-8	0.45	4,200-4,800	60-90
Crandall Creek Trail (existing foot tail with 20' bridge) ^{*1}	500	7-8	0.34	3,500-4,000	40-60
Crandall Creek Trail Connector (existing				12,000-	
foot)	1,100	11-12	1.5-2.0	13,200	680-980
Oak Trail and Patterson Slough Trail (multi-use)	2,700- 2,900	17-19	1.5-2.0	46,000- 55,100	2,600- 4,000
Patterson Slough Overlook Spur (exist-	COO	0.10	1015	5,400-	200.200
ing foot)	600	9-10	1.0-1.5	7,000	200-390
Patterson Slough West Spur (existing	500	0.10	0507	4,500- 6,000	05 155
foot)	500 2,000-	9-10	0.5-0.7	6,000	85-155
Tuibun Trail (relocated - multi-use) *2	2,000- 2,200	17-19	2.0-2.5	35,000- 40,000	2,600- 3,700
Tuibun to Visitor Center Trail improve-	5,300-			53,000-	2,950-
ments (improved - multi-use) ^{*3}	5,500	9-10	1.5-2.0	66,000	4,900
	1,600-			27,200-	2,500-
Harvest Way Trail (multi-use)	1,800	17-19	2.5-3.0	34,200	3,800
	8,500-			93,500-	1,050-
Marsh View Loop Trail (multi-use) *4	8,900	11-12	0.3-0.4	108,000	1,600
Ardenwood Creek Connector (multi-use)	2,000-			22,000-	
*4	2,200	11-12	0.3-0.4	26,400	250-390
	1,600-			17,600-	
Tule Spur (multi-use) ^{*4}	1,800	11-12	0.3-0.4	21,600	200-320
Total	27,000- 28,600	N/A	N/A	310,900- 366,600	13,215- 20,385

Table 6: Trail Disturbance and Fill Volumes

Notes:

*1) Minor improvements to existing foot trail, including re-grading and gravel surfacing in places

*2) Existing Tuibun Trail along Patterson Ranch Road to be relocated to the north within LUPA

*3) Existing Tuibun Trail West to be elevated approximately 1.5 feet to 2.5 feet using fill placed between retaining walls with some boardwalk structures

*4) Trails in Southern Wetlands to be located on Flood Control District constructed maintenance access roads. Signage and minor gravel surfacing may be required.

Restoration Grading and Disturbance

Grasslands and Oak Savanna

To facilitate the control of existing invasive weedy areas and the establishment of native grasses and forbs, and to create a more complex micro-topography for habitat diversity, oak savanna and grassland restoration would include the selective placement of 6 inches to 1 foot of clean imported soil, and 2 to 3 inches of compost. The compost addition will also facilitate carbon sequestration. Because of the large size of these restoration areas, clean soil and compost importation and placement would initially be limited to zones or strips along the Fremont Unified School District future school parcel and the City of Fremont future park parcel, paralleling Ardenwood Boulevard, as well as along the north side of the proposed parking lot, open use area, and picnic and landscaped areas, paralleling Patterson Ranch Road. The zone where imported fill/compost would initially be placed parallels Ardenwood

Boulevard from approximately 250 to 700 feet wide and 2,000 to 2,500 feet long. Proposed imported clean fill in this area would range from 15,000 to 20,000 cubic yards, with proposed compost additions ranging from 8,000 to 10,000 cubic yards. The zone paralleling Patterson Ranch Road ranges in size from a width of 200 to 400 feet, and a length of 1,000 to 1,500 feet. Initial imported clean fill in this area would range from 8,000 to 10,000 cubic yards, with proposed compost additions ranging from 4,000 to 5,000 cubic yards.

The proposed grassland/oak savanna restoration work also includes selectively scraping or removing 2 or 3 inches of weed-seed laden topsoil and placement under the proposed parking lot and open use area (up to 20,000 cubic yards), and importing and placing 6 inches to 1 foot of clean suitable fill/topsoil and 2 to 3 inches of compost over the existing soil surface in grassland/oak savanna restoration areas to reduce weed competition. Total imported fill/topsoil volume is estimated to range from 30,000 to 50,000 cubic yards. Compost addition to oak savanna areas is estimated to range from 15,000 to 25,000 cubic yards.

Seasonal Wetlands

Seasonal wetlands enhancement achieved by shallow (1 to 2 feet deep) excavation is proposed to occur in two areas near the east and west ends of Patterson Slough within the Patterson Slough Natural Unit, as well as within the Western Wetlands Natural Unit. Approximately 3 to 5 acres of seasonal wetland excavation and grading are proposed for these areas, resulting in cut volumes of between 5,000 and 16,000 cubic yards (each area). All seasonal wetlands excavation and creation would occur in areas that have not been identified as being Corps of Engineers Jurisdictional Wetlands. Cut soil volumes from seasonal wetlands enhancement grading would be placed to elevate the open use area, parking lot and picnic/landscape area or placed within the Farm Yard area. Grading for habitat restoration and flood control purposes in the Southern Wetlands Natural Unit was previously discussed under the section heading 6.0 "Surface Water and Groundwater Management".

Because of nearly ideal soils and shallow groundwater conditions, only minimal grading and disturbance would be performed to restore and enhance the willow sausal and mixed riparian forest along Patterson Slough. Invasive weed control in areas of proposed mixed riparian forest and willow sausal would be achieved by mowing, grazing, and selective herbicide application and compost placement, with eventual full control achieved by shading provided by a dense tree canopy.

1.4 Determination

An Initial Study has been prepared under the direction of the East Bay Regional Park District's Planning, Stewardship and GIS Services Department, in which the environmental effects of the proposed project have been evaluated. On the basis of this Initial Study, a copy of which is attached, the Park District has found that the proposed project could have a potentially significant effect on the environment, but at least one effect has been adequately analyzed and addressed by mitigation measures as described in the attached Initial Study. An Environmental Impact Report is required, but it must analyze only the effects that remain to be addressed.

Prepared by: Karla Cuero, Project Coordinator, Environmental Programs

ATTEST:

Karla Cuero Project Coordinator Date: _____

2.0 BACKGROUND AND SITE INFORMATION

2.1 Introduction

The East Bay Regional Park District has prepared this Initial Study for the proposed project (described in Section 1.1), pursuant to the California Environmental Quality Act, as amended (Public Resources Code Section 21000 et seq.), and in accordance with the State of California *CEQA Guidelines* (California Code of Regulations Section 15000 et seq.).

The purpose of this Initial Study is to determine whether implementing the Coyote Hills Restoration and Public Access Project at Coyote Hills Regional Park project could result in potentially significant effects to the environment, and, if so, to incorporate mitigation measures to eliminate or reduce the project's potentially significant effects to less-than-significant levels.

As stated in 1.3 Determination, above, on the basis of this Initial Study, a copy of which is attached, the Park District has found that, the proposed project could have a potentially significant effect on the environment, and an Environmental Impact Report is required.

2.2 Project Purpose and Need

The East Bay Regional Park District has developed the recommendations and proposals contained in the Coyote Hills Restoration and Public Access Project Land Use Plan Amendment to protect and appropriately manage natural and cultural resources while providing the public with educational and low-impact, passive recreational opportunities.

2.3 Required Permits and Approvals

It is anticipated that permits and/or project approvals would be required from the following separate agencies:

Federal Agencies

- U.S. Army Corps of Engineers Permits for any earthwork in jurisdictional wetland areas or over Waters of the U.S. Under Section 404 of the Clean Water Act permits would be required for excavation and placement of fill for public access facilities, such as bridges and trail structures. These may be covered under Corps Nationwide Permit 14 *Linear Transportation Projects*. Revegetation/enhancement of existing seasonal wetlands and riparian areas may be covered under a Corps Nationwide Permit 27 *Aquatic Habitat Restoration, Establishment, and Enhancement Activities*
- U.S. Fish & Wildlife Service and National Marine Fisheries Service The Corps of Engineers may initiate consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act because of activities in wetlands/ waters that are occupied by listed or protected species. The agencies may consult on the potential impacts of the proposed project to Special Status fish and wildlife species and their habitat, and require project specific measures to avoid and minimize impacts, and to provide appropriate compensatory mitigation.

State Agencies

Department of Fish and Wildlife – A Section 1600 Stream or Lakebed Alteration Agreement may be
required from the California Department of Fish & Wildlife for activities such as building demolition and
restoration planting within or near the Patterson Slough bank top and riparian corridor, as well as for
bridge crossings of Ardenwood Creek, near Crandall Creek, and the Alameda Creek cantilever walkway
addition. Coordination and consultation with them may also be required for issues associated with
potential project impacts on or within habitat areas occupied by protected or listed species covered under
the California Endangered Species Act, such as for northern harrier and Black rail., and for any protected

plant species. This would also include development and approval of mitigation or restoration and resource protection plans.

 San Francisco Bay Regional Water Quality Control Board (RWQCB) –The project may require Water Quality Certification under Section 401 of the Clean Water Act, Notice of Intent (NOI) for construction activity, and Waste Discharge Requirements (WDRs) pursuant to California's Porter-Cologne Act if any wetlands or state and federal waters are impacted.

Regional Agencies

• **Bay Area Air Quality Management District** - Construction work involving use of heavy equipment and associated air emissions will require a permit from this agency.

County and Local Agencies

City of Fremont

- In accordance with the City's General Plan and Zoning Ordinance, parts of the Project may be subject to City approval of a Conditional Use Permit (CUP). A Discretionary Design Review Permit for site improvements (i.e., parking lots, restroom building, picnic area, kiosk, etc.) and Historic Architectural Review for demolition of the Labor Contractor's Residence and any exterior improvements or modifications to other potentially historic structures, such as the Milk House. The proposed farm stand would be considered an ancillary use to an otherwise permitted agricultural use, but is subject to special provisions contained in Fremont Municipal Code (FMC) Section 18.19.470 (Roadside Stands). The Park District will coordinate with the City to verify applicable permit requirements and some of these requirements may be met by voluntary compliance.
- The Conditional Use Permit and Discretionary Design Review Permit will be subject to the review and approval of the Planning Commission. The Historic Architectural Review will be subject to review and approval of the Historic Architectural Review Board and City Council (for demolition of the potentially historic residence).
- Grading, stormwater management and drainage, and building permits, including CALGreen compliance, will be required for the 20-car and 100-car parking lot, and the restroom. Any bridges over FEMA regulatory flood plains will require review by the City Engineering Department and approval by the City's Floodplain Manager in the Engineering Department, along with review by ACFCWCD.
- Approval of Project Plans, Encroachment Permits and other construction agreements will be needed from the City for improvements to the Patterson Ranch Road-Paseo Padre Parkway intersection and road improvements such as driveway openings in their ROW.
- Several other City-issued permits and approvals typically issued for a development project after City review of plan and permit application submittals may not be applicable to the Park District, a Special District governed by its enabling legislation. These include the stream course protection permit that regulates development within or near a 20- to 30-foot setback zone from watercourse centerline or bank and landscape permit requirements. The District will coordinate with the City for compliance with applicable standards for this atypical restoration and public access project.

Alameda County Flood Control and Water Conservation District

Project Engineering Plans for all trails and structures on ACFCWCD lands will be subject to review and agreement, including:

- Footbridge at the Crandall Creek Trail connection,
- All trails within the Southern Wetlands Natural Unit,
- Trail and bridge crossing of Ardenwood Creek, and
- Improvements to portions of Patterson Ranch Road, Tuibun Trail modifications, and utility upgrades and extensions to the west of the Project area.

Alameda County Water District

Project work elements that require coordination, permit applications, and approval from ACWD include:

- Location and destruction of abandoned wells in areas affected by project grading activities.
- Construction of any new well, and/or repair of an existing well for temporary use as an irrigation water source for native tree, shrub, and landscape establishment. The existing agricultural well can be repaired or replaced/deepened as part of an independent project.
- Deep piers for bridges and boardwalk structures or wildlife observation platforms that may penetrate near-surface aquifers.
- Permit from ACWD to extend a domestic waterline from Paseo Padre Parkway to the proposed restroom facility and picnic area.

Alameda County Transit District

Coordination with the Alameda County Transit District regarding transit routes in the Project vicinity, and/or adding a new bus stop/bus shelter along Paseo Padre Parkway and near the Park entry.

Alameda County Environmental Health

Permitting and coordination for abandonment and closure of any septic tank and leachfields associated with historic agricultural buildings.

Union Sanitary District

The Expansion Project Area is outside of the Union Sanitary District (USD) Service Area, and the proposed restroom will need to be annexed to the USD as part of an Alameda County Local Agency Formation Commission (LAFCO) application. Permits from USD will be needed for connection to the sanitary sewer main.

Any proposed construction within USD easement or heavy construction traffic over USD force mains (FMs) also requires specific approval from USD. For construction traffic/haul roads, USD will require an Encroachment Permit that may include a specific agreement and temporary improvements to bridge over FMs, such as using steel trench plates.

2.4 Existing Site Conditions

The Project site generally consists of open grassland and poor quality seasonal wetlands adjacent to the Coyote Hills, including active and fallow agricultural fields. Ardenwood Creek (P-Line flood control channel) crosses the southern portion of the property and drains into Pelican Marsh within Coyote Hills Regional Park to the west. Patterson Slough meanders through the property north of Patterson Ranch Road, which bisects the middle of the site, connecting Paseo Padre Parkway and the existing Coyote Hills Regional Park. Trees are concentrated along the sinuous Patterson Slough north of Patterson Ranch Road, and a grove of mature oaks is located near the intersection of Paseo Padre and Patterson Ranch Road.

There are two developed areas within the Project site. North of Patterson Ranch Road there is a small one-story structure known as the Labor Contractors Residence that was formerly used as housing. This structure is located in front of the riparian canopy at Patterson Slough.

The second area is known as the "Oak Tree Produce Complex", located along Paseo Padre Parkway approximately 400 feet south of the intersection with Patterson Ranch Road. It has also been called the "Farm Corporate Yard". This area has an informal gravel parking area, and contains one wood historic structure (Arden Dairy Milk House) and three metal buildings used as farm structures. It is sited on a paved pad that is raised approximately 1-2 feet above the surrounding grade.

The following provides an overview and summary of the environmental setting of the Park Expansion area. A more detailed discussion is provided in the companion document, Questa's *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report*¹.

With the exception of about 20 acres of recently farmed land located on the southwest side of the Patterson Ranch Road- Paseo Padre Parkway intersection, and the developed approximately four-acre farm corporation yard area, most of the 306 acre project area consists of fallow and weedy fields occur throughout the Park expansion area. Within this area is a 12-acre riparian corridor along Patterson Slough. Scattered seasonal wetland and willow thickets occur along portions of Patterson Ranch Road.

Visual Resources

The Coyote Hills rising above the Bay Plain, as seen from Paseo Padre Parkway, form the most striking and visually important view within the project area. The other prominent visual resource is the willow lined Patterson Slough which provides a continuous naturally appearing and meandering tree canopy feature in the northern portion of the site.

Other visual elements existing at the site include utility poles, transmission lines, and the fenced farm service yard adjacent to Paseo Padre Parkway.

The current Park entry at the Patterson Ranch Road- Paseo Padre Parkway intersection is defined by the gravel parking lot and farm service yard. Most of the farm land and other un-farmed fields are fallow and can take on a weedy and un-kept appearance if not regularly mowed or grazed.

Agriculture

The Park expansion area was farmed for over 150 years, beginning in the late 1850s. Under the terms of a current lease agreement with Perry Farms Inc., about 115 acres of land located both north and south of Patterson Ranch Road are available to be farmed This area is also within an Agricultural and Open Space Easement (See **Figures 9 and 10**). However, because of the lack of a dependable irrigation water supply north of Patterson Ranch Road, only about 45 acres (south of Patterson Ranch Road) are suitable for farming. About 20 acres of land was farmed in 2016, but the land was fallowed in 2017 and 2018 because of a problem with the irrigation well. This land is farmed using certified organic farming methods. The existing lease with the farm operator expires in December of 2019, but can be renewed. Currently the lease does not specifically cover use of buildings in the Farm Yard area.

Biology

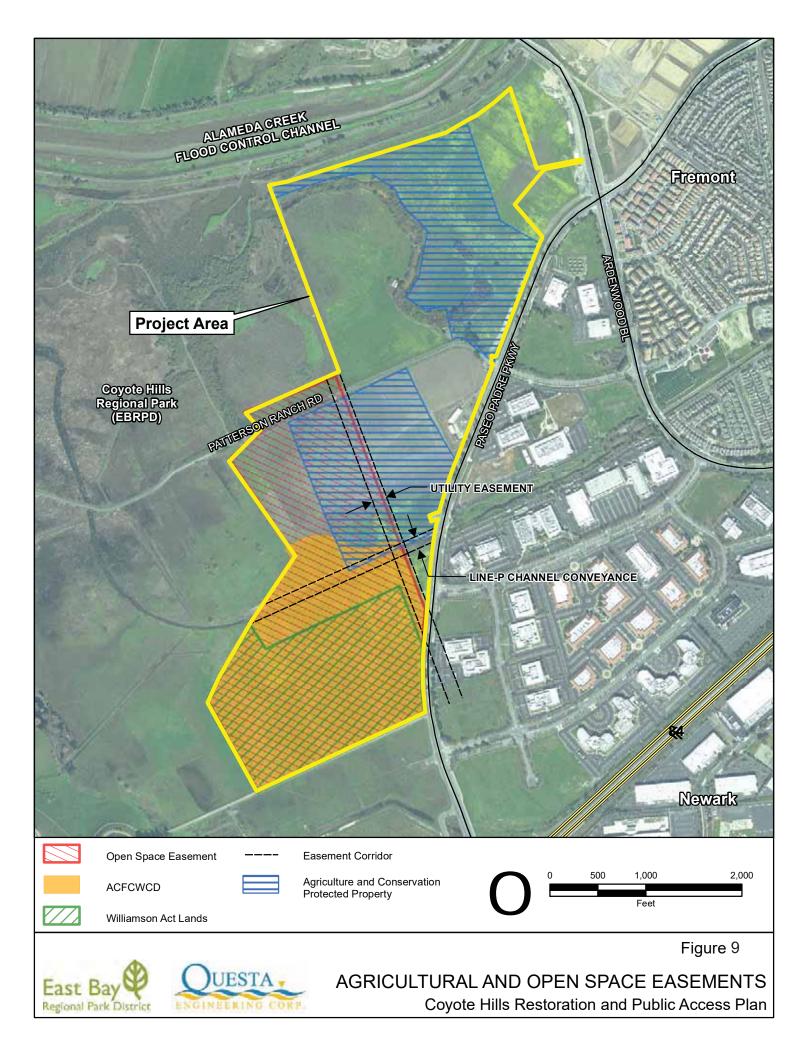
Existing biological resources are discussed in detail in the Project *Existing Conditions and Opportunities and Constraints Report*, with additional information developed for the Project EIR.

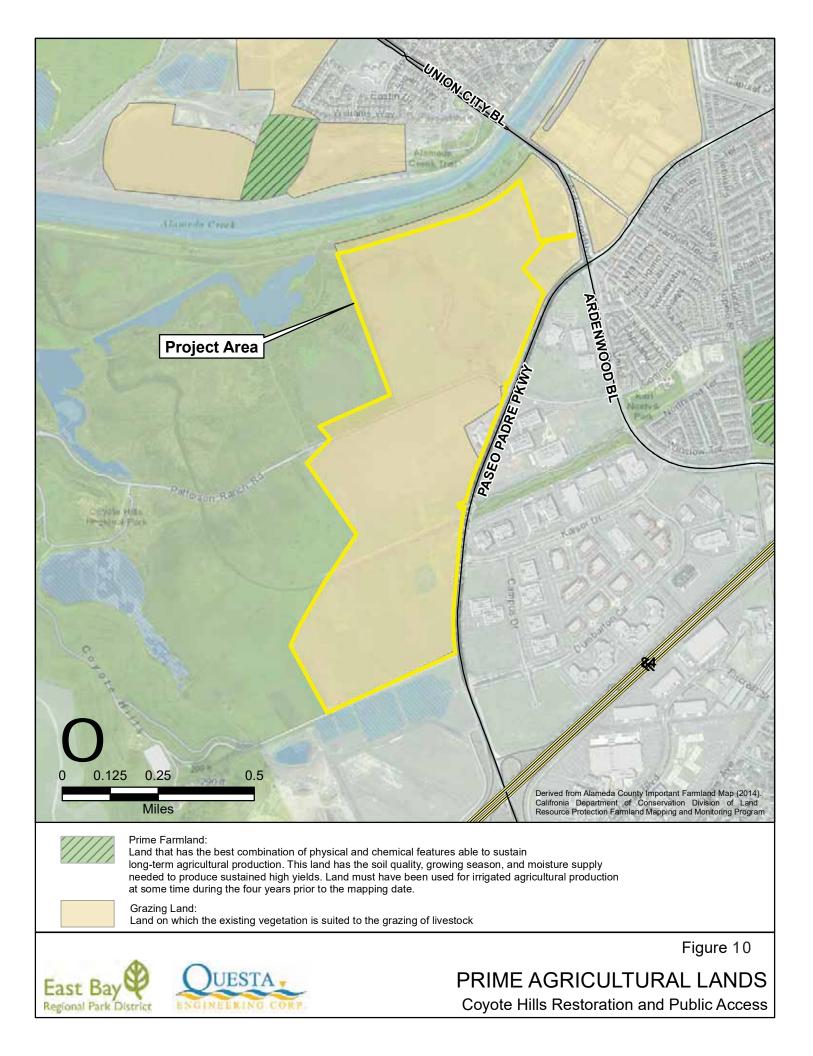
Cultural Resources

Known catalogued, and significant Native American (Ohlone people) cultural resources occur within and immediately adjacent to the project area, along with reported and informally mapped, but not catalogued or professionally investigated resources. In addition there is a potential for other presently unknown cultural resources, buried at shallow depths, to occur throughout the project areas, especially within the farm yard area, north of Paterson Ranch Road, and notably in the general vicinity of Patterson Slough.

Two historic buildings occur within the project area, associated with the historical Patterson Ranch farming operations. One is the Ardenwood Milk House Building located in the farm yard area. The other is the Farm Labor Contractors residence, located near the southeast end of Patterson Slough. Both of them are 1930's era buildings. The Milk House building is in good condition while the Farm Labor Contractors building is in fair to poor condition.

¹ Questa Engineering Corporation. *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report*. September 2018.





The Land Use Plan Amendment Unit Designations and Plan components recognizes the very high Cultural Resources sensitivity of the Park expansion area, especially the park entry and farm yard area, and the area north of Patterson Ranch Road and along Patterson Slough.

Geology and Soils

The project area is underlain by alluvial deposits, including fine grained flood basin and estuarine deposits south of Patterson Ranch Road and recent stream alluvium to the north (**Figure 11 Geology Map**).

There are no known or recognized active earthquake faults that pass through the project area, although there are several historically active faults that are located nearby (Figure 12 Fault Map), including the Hayward Fault located 4 miles to the east and the San Andreas Fault, located 13 miles to the west.

Although there is little or no risk of fault rupture within the Project area, Project area soils are susceptible to liquefaction associated with strong ground motion from activity on regional faults. The design of all structures, including buildings and bridges will require seismic consideration in design. Other geotechnical issues requiring consideration in planning and design include the occurrence of poor drainage and high-groundwater conditions, clayey and expansive soils, and in the southern part of the Project area – corrosive soil conditions that could affect concrete and metal structures, including building foundations, bridge abutments and underground utilities.

The estuarine deposits are strongly saline and alkali (sodium affected) south of Ardenwood Creek where they form the Pescadero soil series. On the west side of the project area they are mapped by the USDA as being Omni strongly saline. (Figure 13 Soils Map) Soil studies completed for the LUPA found them to be slightly to moderately saline and alkaline. The majority of the soils were mapped as Omni drained, or non-saline. The best agricultural soils occur along the east side of the project area, on the slightly higher in elevation and better drained, non-saline areas.

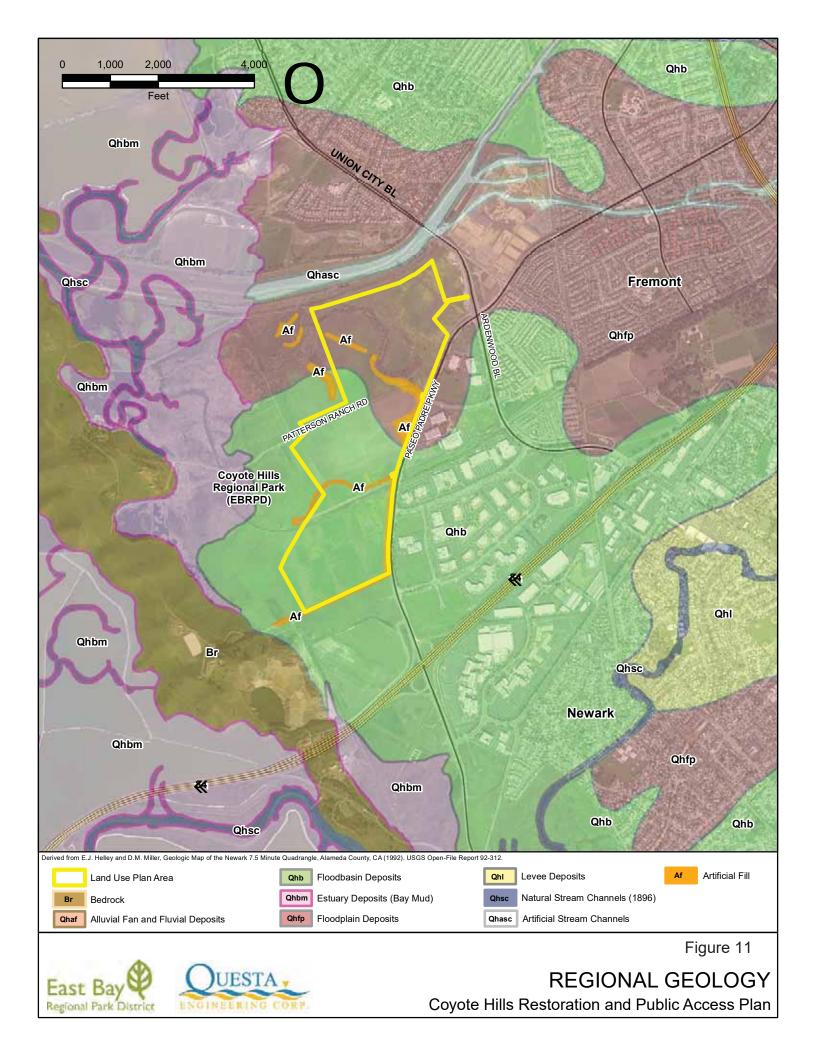
High levels of salt and sodium in the surface soils and subsoils in some areas will dictate the kinds of habitat that can be restored, especially in the southern and southwestern portions of the Park expansion area. Soil and drainage conditions are also poor. **Figure 14** shows soil salinity/alkalinity conditions in the Park expansion Project area based on soil sampling and laboratory analysis. The high groundwater conditions and the presence of saline-alkali shallow groundwater in some areas means that portions of project area and the plant communities that the soils and hydrologic conditions support may be susceptible to climate change and associated shallowing of the groundwater table and salinization. This will need to be accounted for in development of restoration and enhancement plans and management of plant communities.

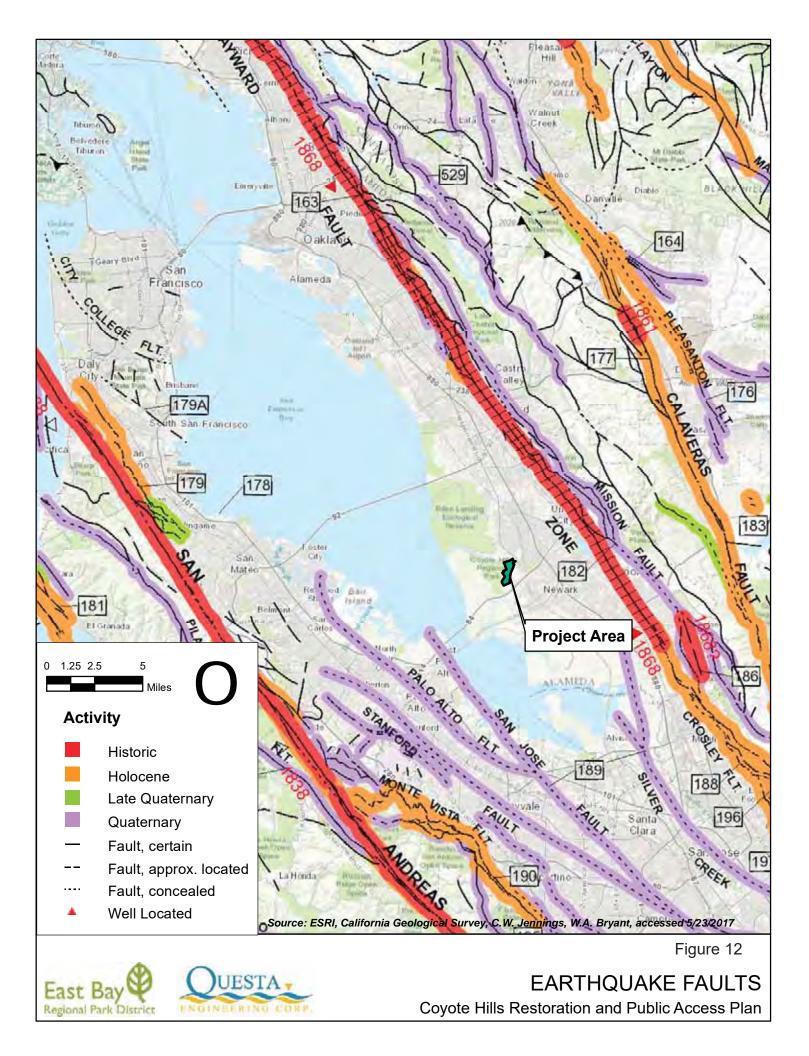
Surface and Groundwater Hydrology

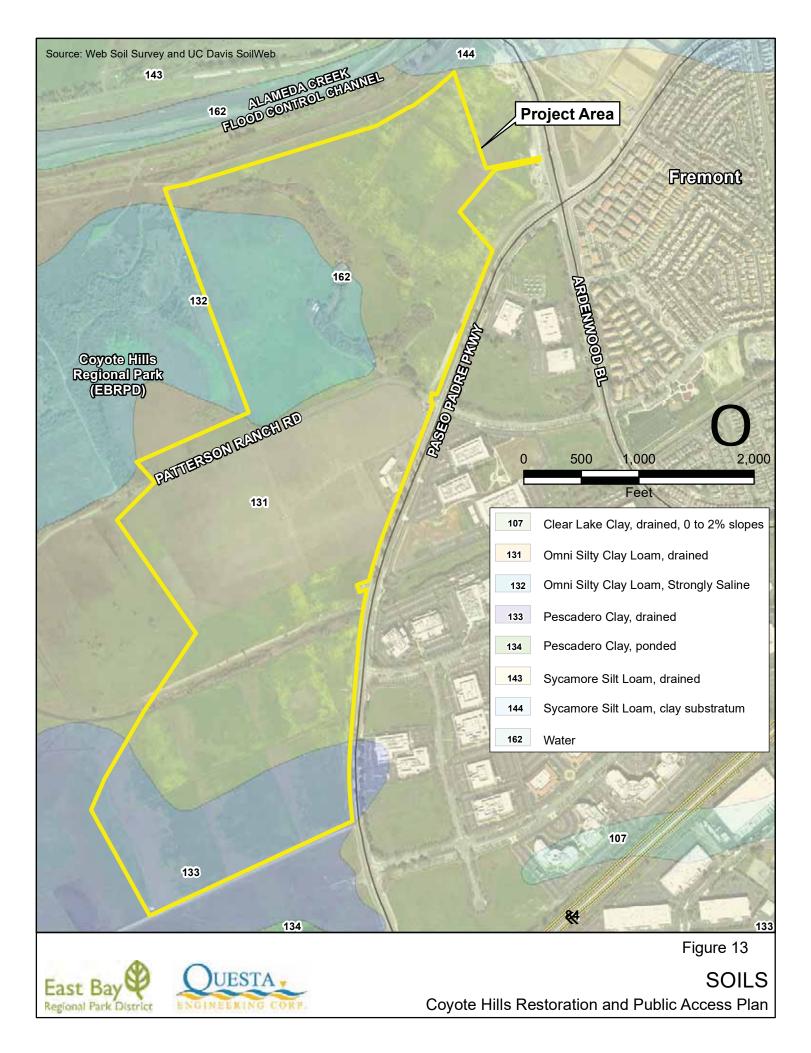
As noted in the Biology summary, hydrologic conditions in the project area have been significantly altered by historic farming including agricultural drainage and historical irrigation well pumping, urbanization, and flood control channel construction. (Figure 15)

Surface Water. In terms of surface water hydrology, the project area consists of a closed drainage basin bounded on the east by the higher ground of Paseo Padre Boulevard, on the north by the Alameda Creek Flood Control Levees, on the south by the Burrowing Owl Levee, separating the project area from Cargill Inc. lands, and to the west by the Coyote Hills foothills.

Surface water inflow into and through this basin is from storm water runoff and groundwater seepage into the Ardenwood Creek flood control channel, storm water runoff conveyed in the Line K/Crandall Creek flood control channel, and by incident rainfall which is collected in several historic agricultural drainage ditches and discharged to Line P and Line K near or immediately downstream of the Park expansion project area. Surface flow from Ardenwood Creek is through the J-pond complex west of the Park expansion area, where flood flows are held or is detained for eventual release via tide gates in the southern Alameda Creek levees when flow conditions in this







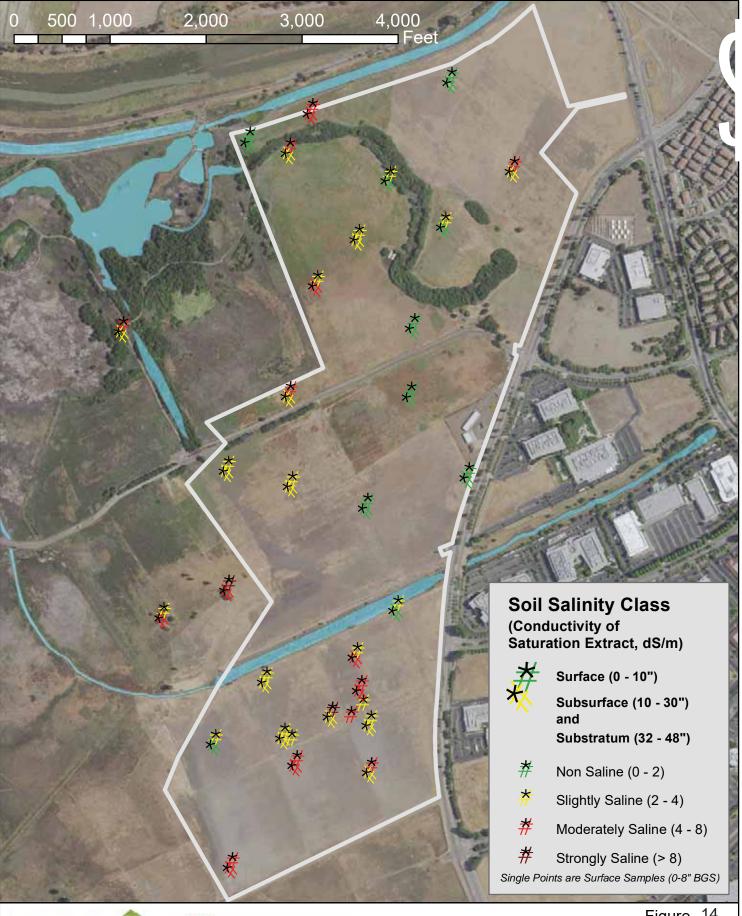


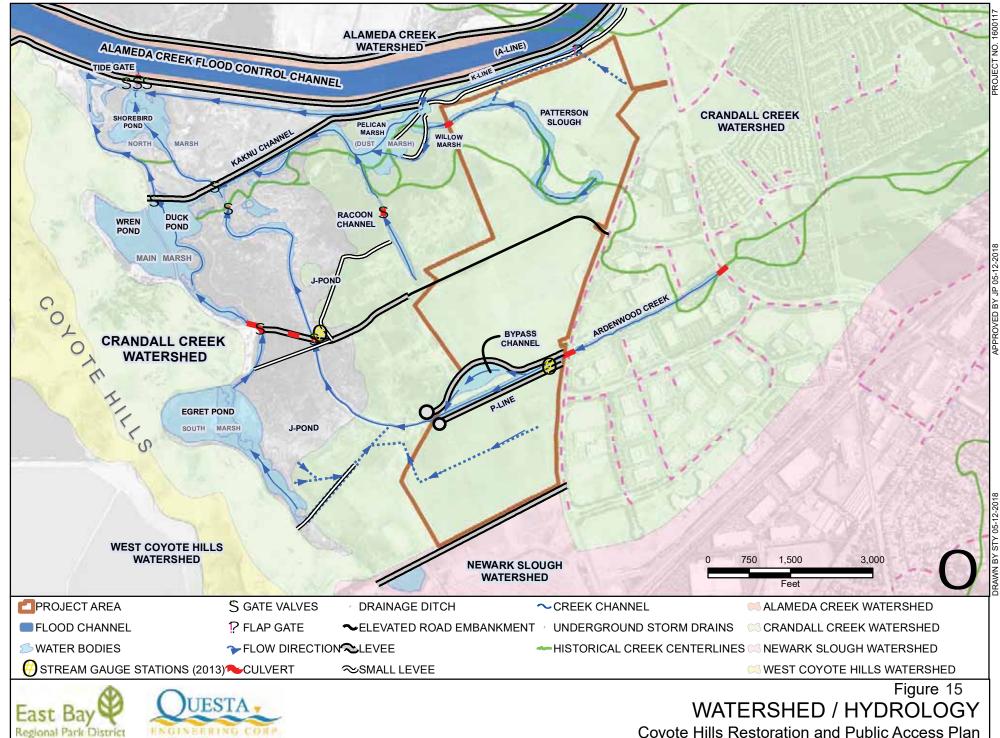
Figure 14 SOIL SALINITY



East Bay

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Coyote Hills Restoration and Public Access Plan



Coyote Hills Restoration and Public Access Plan

system allow release of the stored water through the levees. Extended periods of shallow ponding occur following heavy storm events such as occurred during the winter of 2016.

The surface water in Ardenwood Creek is fresh where it flows into the project area and becomes increasingly brackish as it moves through the historic tidal marsh and alkali wetlands to the west. It is brackish where Patterson Ranch Road crosses Ardenwood Creek.

Crandall Creek storm water runoff and flood flows mostly bypass the Park expansion project area in a leveed system on the north and eventually join flows from Ardenwood Creek downstream of the project area before discharging via the southern levee tidal gates of Alameda Creek. Crandall Creek flow is also fresh at the east end of the project area and becomes increasingly brackish to the west. FEMA floodplain mapping and site observations indicate a small amount of flow can potentially over-top the levee system to enter Patterson Slough, but this was not observed during the wet winter of 2016-2017. The Coyote Hills Regional Park to the west has not been included in FEMA floodplain mapping, but ACFCWCD has completed similar hydrologic studies that are used to plan and manage this area, which serves as a flood detention facility.

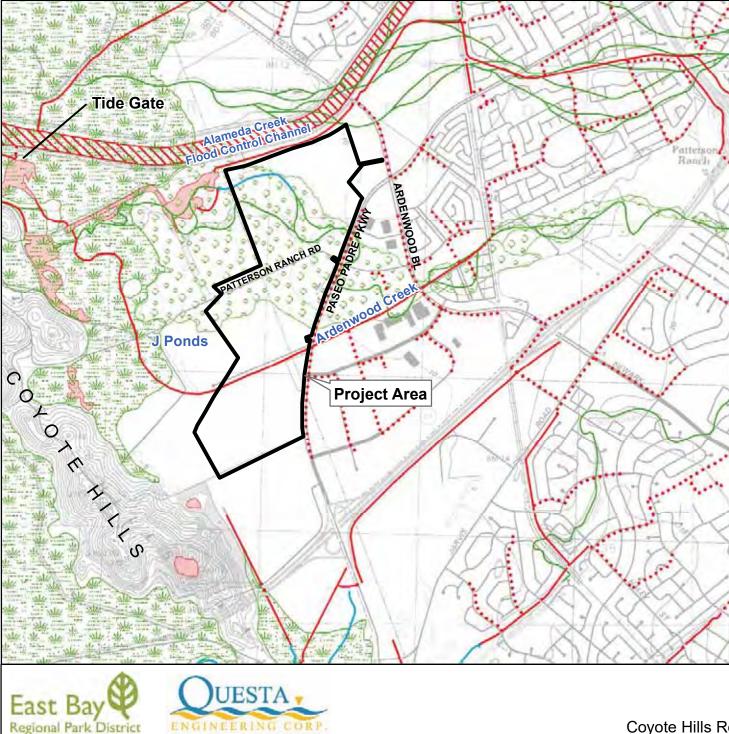
Patterson Slough is a remnant of the historic braided Ardenwood Creek Channel before flood channel construction relocated Ardenwood Creek to the south and placed Crandall Creek immediately to the north. (Figure 16) It has a small watershed that directs site runoff to Patterson Slough via a drainage ditch that originates parallel to and west of Ardenwood Boulevard and then runs along the outboard or toe of Crandall Creek levee to discharge to the Slough near its downstream end.

Patterson Slough does not hydrologically interact with its adjacent alluvial floodplain and serves hydrologically as a drainage ditch that intercepts shallow groundwater. Several deeper ponds within the Slough and the generally flat channel slope means that the Slough drains slowly and ponds water in the deeper ponds throughout most of the year in seasons with above average rainfall. The Slough discharges to the Dust Marsh west of the western end of the Park expansion project area via an 18-inch culvert. Water quality in the Slough is fresh to slightly brackish. Salinity levels are such that sensitive amphibians such as California red-legged frog may not be provided suitable habitat.

Groundwater. The groundwater hydrology of the Park expansion area is complex, both horizontally, and in the vertical dimension. This is especially the case in the upper zone, the 3 to 8 feet immediately below ground surface. The upper part of this shallow zone most influences native shrub and tree growth, and therefore restoration and enhancement design. An interpretation of depth to groundwater based on monitoring wells and soil borings and test pits is presented in **Figure 17**.

The shallow zone can be thought of as consisting of three distinctly different but interconnected ground water bodies of varying salinity-alkalinity (Figure 18):

- A saline-alkali or very brackish body contained in very fine-grained estuarine deposits south of Ardenwood Creek that communicates slowly with and is influenced by San Francisco Bay water to the southwest and west. Ground water in this area varies seasonally in depth from 2 to 5 feet. This area was previously drained by agricultural ditches to allow farming, but the ditch system has since largely deteriorated. Shallow zone groundwater seeps into Ardenwood Creek, especially during summer months.
- Capillary rise of the shallow zone keeps sub-soils moist to near-saturated at depths of 1.5 to 2.5 feet below ground surface, and has caused salts and sodium to accumulate at very high levels that limits the survival of non-salt and sodium tolerant plants, especially in the subsoil. Restoration grading that exposes the highly saline alkali sub-soils needs to be considered in design and native plant materials selection. In places, water ponds in shallow surface depressions (historically alkali vernal pools) and perches on a dense, discontinuous sub-soil clay zone during winter months. These merge to create near continuous saturated soil conditions for periods of time following especially heavy rain events, in places in the southern part of the Project area.



Flow Network

- Creek, watershed at least 0.2 sq km
- Engineered Channel
- Underground culvert or storm drain, ≥ 24" diameter
- Flood Control Channel, at least 200 ft wide
- Modern Shoreline
 - Bay or Natural Lake
 - Artificial Water

Historical Features, Circa 1850

Historical Creek

- ----- Well-located
- ----- Well-located with distributary point
- Approximately located
- Approximately located with distributary point
- Historical Shoreline

Historical Wetlands

- Historical Tidal or Freshwater Marsh
- Historical Beach
- 🔍 🗌 Historical Willow Grove
- Historical Slough
- Historical Salt Pond
 - Historical Lake

Modified from Creek & Watershed Map of Western Alameda County: A Digital Database (2010). Oakland Museum of California.

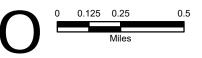
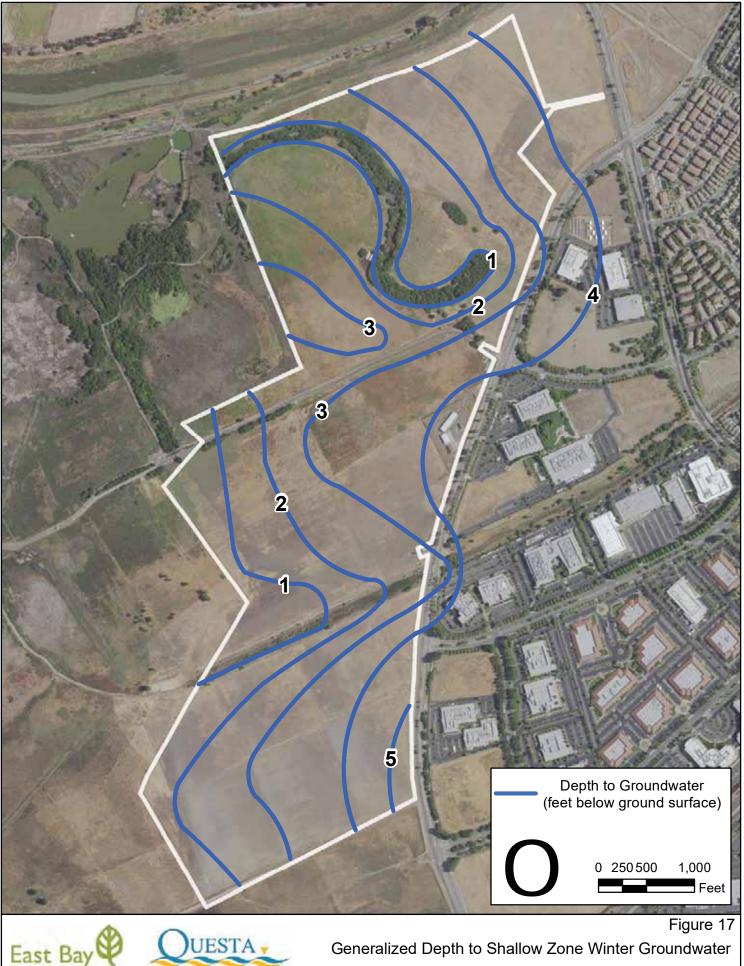


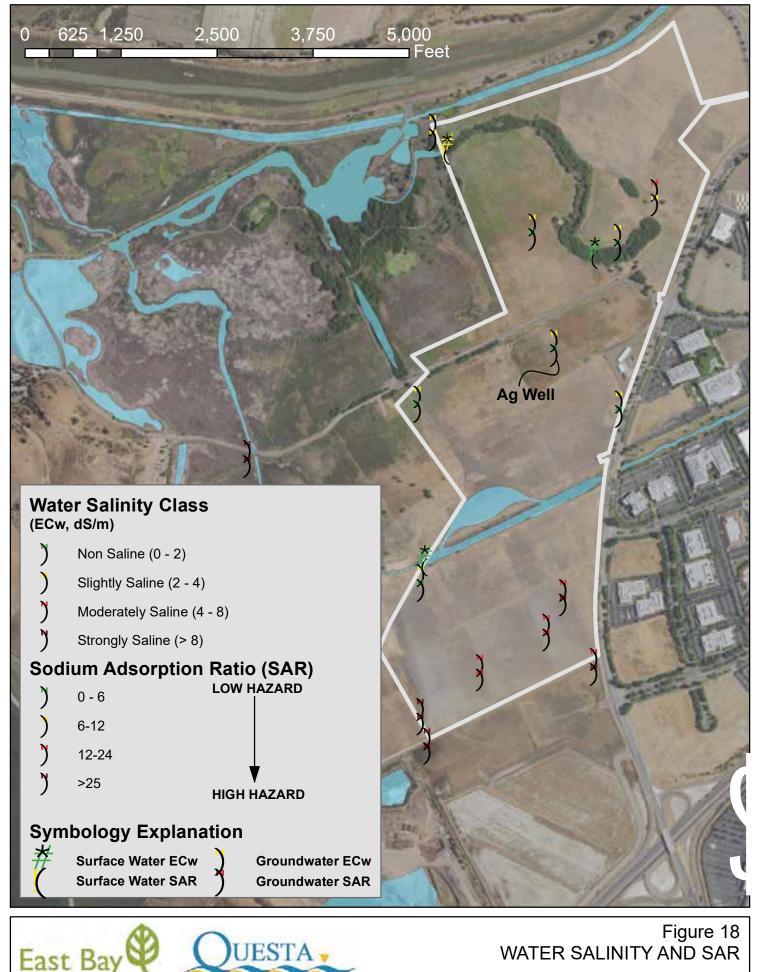
Figure 16 HISTORIC CREEKS

Coyote Hills Restoration and Public Access Plan



Coyote Hills Restoration and Public Access Plan

Regional Park



Regional Park District

Coyote Hills Restoration and Public Access Plan

- A fresh to very slightly brackish shallow groundwater body occurring in the vicinity of north of Ardenwood Creek and south of Patterson Ranch Road. This groundwater body is contained in fine grained alluvial basin deposits at depths ranging seasonally from 2 to more than 6 feet. Ground surface elevations are slightly higher in the eastern part of this area and the soils are better drained. This eastern area has the best and most productive agricultural soils. Ponded conditions and seasonally perched shallow groundwater occurs in the western most part of this area, extending to an area north of Patterson Ranch Road near the existing kiosk.
- A fresh to slightly brackish shallow zone groundwater body extends north of Patterson Ranch Road. The confining clay layer that separates the shallow zone from somewhat deeper groundwater is mostly missing from this area, stripped by geologic time-line erosion. This allows groundwater contained in sands and gravels associated with the ancestral Ardenwood Creek braided stream system to up-well under artesian forces. Groundwater apparently flows slowly through the finer grained stream alluvium in this area, and more rapidly in sub-surface preferential flow paths created by the near-surface buried stream channel deposits. Groundwater recharge area. Groundwater flowing in the shallow buried stream sands and gravels is intercepted in the channel bank of Ardenwood Creek east of Paseo Padre Parkway and also up-wells in the bottom of Patterson Slough, a remnant of the historic Ardenwood Creek. This area also has depressional areas and perching zones near the Slough that result in extended periods of shallow water ponding and saturated sub-soil conditions. Shallow groundwater with a capillary fringe that keeps the potential root zone of native tree species damp to moist throughout much of the year in average and above average rainfall years occurs here. This creates favorable conditions for riparian restoration without the need for extensive grading and hydrologic conditions modification.

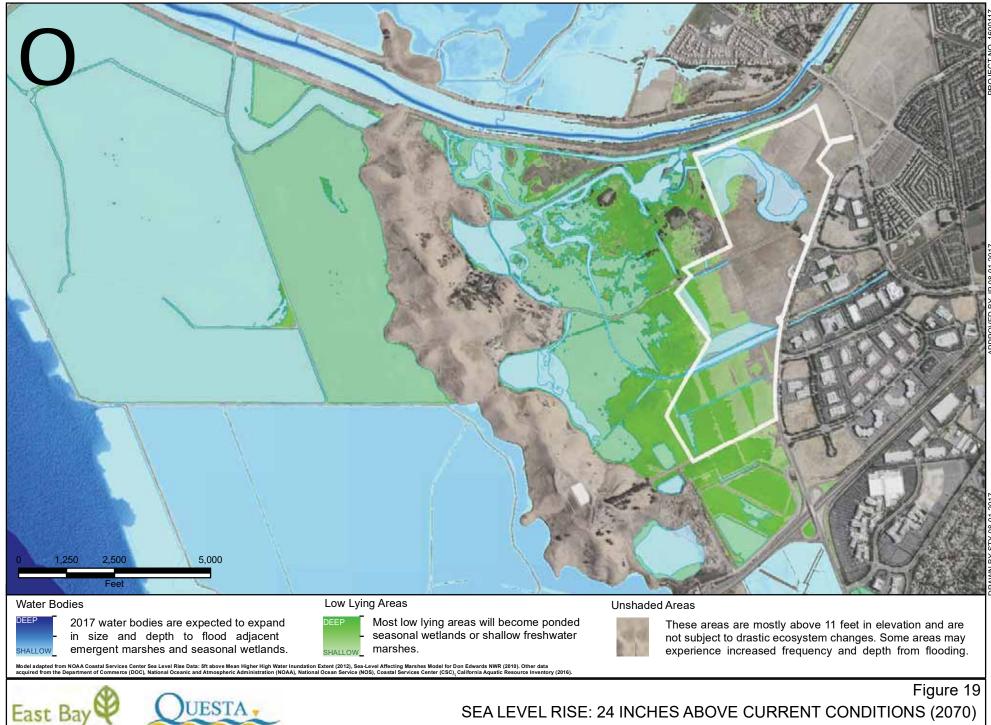
In addition to the shallow groundwater zone, which affects restoration and agriculture, there are several recognized deeper aquifers, including an upper or Newark aquifer, a middle zone consisting of the Centerville and Fremont aquifers, and an unnamed deep aquifer. Water in the upper aquifer has been affected by Bay sea water intrusion and is slightly saline and non-potable. It may be suitable for restoration plant establishment irrigation, but not for must agricultural crops. The middle and deep aquifers have the best quality of water and are used for municipal and agricultural purposes. Alameda County Water District closely manages the Niles Cone groundwater basin, including destroying or closing poor quality or abandoned wells, especially those located close to the Bay, monitoring and regulating new wells, and bore holes, and conducting an active groundwater recharge program to store water, reverse bay sea water intrusion, and protect and improve groundwater quality.

Climate Change and Sea Level Rise

The Project area is not physically connected to San Francisco Bay and therefore will not be directly physically impacted by rising Bay tides, including extreme tides, with sea level rise. In general terms, climate change will likely result in a warmer and dryer climate in northern California. Recent trends indicate that northern California is already experiencing some of the hottest years in recorded history. It is also experiencing shorter winters, with significant rainfall appearing to come later in the season and ending sooner than typical historic patterns. Rainfall intensity and runoff patterns also appear to be changing, with more short-duration high-intensity storms and associated flashy runoff events.

The Project area is not physically connected to San Francisco Bay and therefore will not be directly physically impacted by rising Bay tides, including extreme tides, with sea level rise. In general terms, climate change will likely result in a warmer and dryer climate in northern California. Recent trends indicate that northern California is already experiencing some of the hottest years in recorded history. It is also experiencing shorter winters, with significant rainfall appearing to come later in the season and ending sooner than typical historic patterns. Rainfall intensity and runoff patterns also appear to be changing, with more short-duration high-intensity storms and associated flashy runoff events.

Sea level rise in this managed flood control basin would primarily affect the efficiency of discharging flood waters through Alameda Creek levee tide gates from Ardenwood Creek and Crandall Creek inflows, because of the result-



Regional Park District

Coyote Hills Restoration and Public Access Plan

ant higher tidal levels in Alameda Creek and higher flood water surface elevations. Climate change may result in more frequent and prolonged periods of ponding in seasonal wetlands and within the Patterson Slough, as well as the gradual rise of the shallow groundwater table associated with tidal affects on groundwater from the bay margin to the west and southwest. The shallow groundwater zone may also become more saline and alkaline over time, associated with the influence of rising Bay tides. The AFCWCD Phase 2 Flood Control Project , which will improve Line P through the existing Park, will help alleviate the depth and extent of winter ponding.

The only existing infrastructures potentially at risk in the not too distant future throughout the Project area are several low areas along Patterson Ranch Road between the kiosk and the vicinity of the Ardenwood Creek Crossing leading to Park headquarters and the Visitors Center. It is expected that as a result of a rise in bay tidal elevations, perennial and seasonal wetlands occurring within and near the Park expansion area will be ponded deeper, and for longer periods with climate change, with some areas with more extended ponding and becoming near perennial. Longer periods with deeper water may be expected to occur in current ponded areas dominated by cattails. (**Figure 19**). Some of these ponded areas currently dry out in late summer and fall months prior to the start of the winter rains period. Especially susceptible to extended ponding and higher groundwater are the low lying areas near the west end of Patterson Slough, and the west side of the central and south portions of the Park expansion area. This effect may increase their wetlands functions and values if properly accounted for in planning and design.

Other potential threats to the Project area from climate change are principally related to an expected increase in extreme weather events, including more often and prolonged periods of drought, and more often very wet winters, when extended shallow water ponding occurs. Shallow groundwater levels may fluctuate up and down during these periods of drought and abundant rainfall, but the long-term trend is anticipated to be a gradual rise in the shallow zone groundwater table, and increased shallow zone groundwater salinity and alkalinity.

Access and Circulation

Currently there are four ways to access the project area, with only one open to the public via automobile; Patterson Ranch Road. This paved road is accessed from Paseo Padre Parkway and extends about 1 ½ miles west to the Coyote Hills Visitor Center. The other three access roads are available to park maintenance staff and to emergency vehicles for incident response:

Crandall Creek Trail- This access way is along the Crandall Creek levee, on the north side of the project area, where it connects to the Willow footpath near the outlet of Patterson Slough. It is designated as a footpath on the existing Coyote Hills Regional Park Trail Map.

Ardenwood Creek Maintenance Roads: Flood control maintenance roads were constructed by ACFCWCD on both the north side and the south sides of the creek as part of their 2016 Line P Flood Control Project. They currently end just past the west end of the Park expansion area. They are not currently available for public use.

Burrowing Owl Trail- This existing multi-use trail is located on the levee embankment that forms the south boundary of the Park expansion area. It is not open to the public for automobile access. The levee maintenance road extends west to the vicinity of the new Dumbarton Quarry Park, scheduled to open to the public in 2019.

All of these existing access ways are potentially available for future use to make off-site trail connections. In addition to these, there is an easement for possible future access to Ardenwood Boulevard, between the Fremont Unified School District school parcel and the city of Fremont park parcel in the northeast corner of the project area.

Utilities and Infrastructure

There is significant existing utility infrastructure crossing through the Project Area, including a 4-inch pressurized sewer line running along the north side of Patterson Ranch Road, along with a 4-inch (not live) PVC water line that is not connected to a meter. A Kinder–Morgan high-pressure underground gas line, Union Sanitary District (USD) sewer trunk and PG&E high-voltage overhead electrical utility lines run southeast to northwest, diagonally across

the property within a utility easement, and there is a Hetch Hatchie water pipeline on the northeast edge near and parallel to Ardenwood Boulevard. A 3-inch water supply line also runs diagonally across the southern and central portion of the property from the vicinity of Dumbarton Court to the vicinity of Kiosk, where it turns to head west along Patterson Ranch Road to serve the visitor center. All of the non-Park District utilities have easements that contain restrictions on construction of improvements within their easement areas, and also have design standards and procedures for new hook-ups to their facilities which are applicable to proposed Park improvements.

Overhead power lines run along the north side of Patterson Ranch Road to the vicinity of the kiosk and provide power to several irrigation wells on the south side of this roadway. Irrigation infrastructure including abandoned wells, concrete well stand pipes and subsurface piping also occurs throughout much of the project area.

The project area is not within the existing service area of Union Sanitary District and connections to this utility will require annexation, which is subject to approval by the Alameda County Local Agency Formation Commission (LAFCO).

Public Services

Police, fire, and emergency response to incidents occurring within the project area are currently handled cooperatively in agreements with the City of Freemont Police and Fire Departments and the Alameda County Fire Department. Follow-up investigations and incident reports are typically handled by the East Bay Regional Park District Police Force. Since most of the Project area is in a "land-bank" status, current park operations and maintenance needs are minimal. Patterson Ranch Road and the Tuibun Trail to the Visitor Center pass through the project area and current Park District staff assigned to Coyote Hills Regional Park patrol and maintains this area, including the small gravel parking lot at the Paseo Padre Parkway intersection. The adjacent farm fields and fallow lands are fenced off and preclude current access by visitors. Park staff oversees weed line trimming along the fence lines, mowing and/or goat grazing of the fallow fields, and provide on-going coordination with the farm lessee.

3.0 CEQA ENVIRONMENTAL CHECKLIST

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	Coyote Hills Restoration and Public Access
	Project
Lead agency name and address:	East Bay Regional Park District, 2950
	Peralta Oaks Court, Oakland, CA 94605
Contact person and phone number:	Karla Cuero, 510.544.2622
Project Location:	In the northwest corner of City of
	Fremont, California, east of Don Edwards
	San Francisco Bay Wildlife Refuge and
	Coyote Hills Regional Park, north of State
	Highway Route 84, west of Ardenwood
	Boulevard and Paseo Padre Parkway, and
	south of Alameda Creek
Project sponsor's name and address:	East Bay Regional Park District, 2950
	Peralta Oaks Court, Oakland, CA 94605
General plan description:	RCP (Open Space – Resource
	Conservation/Public)
Zoning:	O-S (Open Space)
Description of project: (Describe the whole action	See 1.1 Project Description, above.
involved, including but not limited to later phases	
of the project, and any secondary, support, or off- site features necessary for its implementation.)	
Surrounding land uses and setting; briefly describe	West of the project site is the existing
the project's surroundings:	Coyote Hills Regional Park and Don
	Edwards San Francisco Bay Wildlife
	Refuge. An undeveloped, privately-owned
	parcel and State Highway Route 84 are
	located to the south. Ardenwood
	Boulevard and Paseo Padre Parkway and
	residential and commercial development
	is located to the east. Alameda Creek is
	located to the north.
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	See 2.3 Permits Needed, above.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	California Na traditionally and the Project area which was com
Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources	

Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality. California Native American tribes traditionally and culturally affiliated with the Project area requested consultation, which was completed on February 22, 2017.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

	Aesthetics		Agriculture and Forestry	\square	Air Quality
\square	Biological Resources	\boxtimes	Cultural Resources	\boxtimes	Geology/Soils
	Greenhouse Gas Emissions	\boxtimes	Hazards and Hazardous Materials	\square	Hydrology/Water Quality
	Land Use/Planning		Mineral Resources	\boxtimes	Noise
	Population/Housing		Public Services	\boxtimes	Recreation
\square	Transportation/Traffic	\boxtimes	Tribal Cultural Resources	\square	Utilities/Service Systems
\square	Mandatory Findings of Significance				

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
\boxtimes	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:	Date:
Printed Name: Karla Cuero	For: East Bay
	Regional Park
	District

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included following the applicable section of the checklist. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?			\boxtimes	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			\boxtimes	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				\boxtimes

Comment to Questions

The existing Coyote Hills Regional Park, adjacent to the expansion area on the west, contains important a) aesthetic and visual resources. Because of its unique location, open character and varied topography, the Park provides picturesque vistas of the south and central San Francisco Bay region and is visible from distant points as well. Views of wetlands, Don Edwards San Francisco Bay National Wildlife Refuge, the surrounding San Francisco Bay and their associated habitats, and nearby open space including the proposed expansion area, are an important component in the Park's enjoyment. Paseo Padre Parkway, adjacent to the project site on the east, is designated as a scenic route in the Fremont General Plan² and Alameda County General Plan.³ The Alameda Creek flood control channels are considered a scenic resource by the City of Fremont.

The proposed project, which would expand the existing Park to the east, would not affect the visual resources of the Park or the Alameda Creek Flood Control Channel and would have a beneficial impact on the expansion project site. The proposed project would preserve the visual resources of the existing Park, and would enhance the visual characteristics of the project site and provide additional access and vantage points for views of both the existing Park and the expansion area. The project also would enhance scenic resources visible from Paseo Padre Parkway looking to the west. Project objectives in the Land Use Plan Amendment include habitat restoration and enhancement, and improved public access. Project features that would enhance scenic views include 5 miles of new trails and up to six wildlife observation platforms, which would provide new access to the restored/enhanced wetlands and the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit.

6.

² City of Fremont, City of Fremont General Plan, Adopted December 2011, Community Character Element, Diagram 4-

³ Alameda County, Scenic Route Element of the General Plan, May 1966, Amended May 5, 1994, Scenic Route Element of the General Plan Map.

Impacts on scenic views caused by construction of visitor facilities, trails, and infrastructure would be temporary in duration and limited to relatively small portions of the site.

In conclusion, the proposed project would have a *less-than-significant* impact on scenic vistas.

b) The closest state scenic highway to the project area is the portion of SR 84 between Mission Boulevard and I-680 (Niles Canyon).⁴ Although SR-84 runs approximately one mile south of the project area, the segment officially designated as a state scenic highway is located approximately six miles east of the project area. Due to this distance, this designated portion of SR-84 is not within the project's viewshed. Motorists traveling on the state designated scenic segment of SR-84 would not be able to see the project area, nor would individuals on the project site be able to view the scenic highway portion of SR-84. Thus, the project would have **no impact** on views from a state scenic highway.

Paseo Padre Parkway, bordering the project site to the east, and the segment of State Highway Route 84 located south of Coyote Hills Regional Park and the proposed expansion site, have been designated "Scenic Routes" by Alameda County⁵ and the City of Fremont⁶ because they provide unique vistas. The proposed project's habitat and wetland restoration and enhancement would improve scenic resources visible from these designated scenic routes. Retaining the Milk House building, metal storage buildings and agricultural uses would not substantially alter existing scenic resources, nor would construction of trails, observation platforms, entry kiosk, restroom, parking lot, or buried infrastructure. None of these project components would introduce large or incompatible new visual elements to the Park, or substantially degrade its scenic quality. The adjacent Coyote Hills Regional Park contains unique natural and geologic features, like the Coyote Hills themselves, whose scenic character is particularly important. The proposed project would not adversely affect, and would provide additional public access and vantage points for, these existing visual resources. However, demolition of the Labor Contractors residence would result in the loss of an historic building. This is discussed in Section V. Cultural Resources, below.

c) The proposed project would restore and enhance the Patterson Slough, Western Wetlands, and Southern Wetlands Natural Units, which would improve the visual character of these areas. The existing Patterson Ranch farm fields would continue to be used for agriculture, two existing metal storage buildings would be retained, and the historic Milk House building would be preserved and may be adaptively reused for agriculture-related purposes. The existing informal parking area at the intersection of Patterson Ranch Road and Paseo Padre Parkway would be relocated to an existing service area adjacent to the existing storage buildings, and this area would be restored with native vegetation.. None of these changes would substantially alter the existing historic Labor Contractors residence would be demolished and the building site would be included in the restoration of the Patterson Slough Natural Unit. Although demolition of this historic building would have a significant impact on historic architectural resources (see Section V. Cultural Resources), demolition and removal of the Labor Contractors residence would not adversely affect the visual quality of the project site because it would allow the site to be returned to a more natural appearance.

⁴ California Department of Transportation, California Scenic Highway Mapping System, available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed 2 May 2108.

⁵ Alameda County, Scenic Route Element of the General Plan, May 1966, Amended May 5, 1994, Scenic Route Element of the General Plan Map.

⁶ City of Fremont, City of Fremont General Plan, Adopted December 2011, Community Character Element, Diagram 4-6.

The proposed project would construct additional visitor facilities including a 100-car parking lot, restroom, picnic facilities, and new entry kiosk. Proposed bridge crossings include a footbridge to make a connection to the existing Crandall Creek Trail, an 80-foot bridge crossing of Ardenwood Creek west of the western end of the Park expansion area, and a 10-foot wide aluminum structure, cantilevered off of the existing Ardenwood Boulevard crossing of the Alameda Creek Flood Control Channel. This proposed structure would be the most visible to motorists on Ardenwood Boulevard and Paseo Padre Parkway and trail users on the Crandall Creek and Alameda Creek Trails. These structures would both allow greater public access to the enhanced visual resources provided by the project, and alter the existing visual character of the project site. However, the structures and parking lot would be small in scale in relation to the entire acreage of the Park (less than one acre of the 306-acre project site), and would be clustered within a small portion of the site and landscaped with buffer vegetation to blend with surrounding vegetation and existing views. New "developed" areas within the Park expansion area would occupy about 7 acres, less than 5% of the total area. For these reasons, the new structures would not substantially change the existing visual character of the site.

Approximately 5 miles of new trails would be constructed, along with up to six wildlife observation platforms. The trails, which would be constructed at grade, would allow increased public access to the visual resources at the site but would not substantially alter the site's visual characteristics. The viewing platforms, which would be elevated five to eight feet above adjacent grade at locations dispersed throughout the project site, would also increase publicly available views. The observation platforms would be visible from nearby and intermediate vantage points on the site, but would not substantially alter the predominantly natural appearance of the expansion project site.

New and upgraded utilities would be buried and, after construction, would not affect the visual character of the site.

The project would not conflict with the applicable zoning class (Open Space), or Fremont General Plan policies governing scenic quality.

Implementation of the LUPA would not substantially alter the project area's distinctive visual character, substantially degrade public views of the site, or conflict with applicable zoning and other regulations governing scenic quality. Therefore, the project would cause a *less-than-significant* visual impact.

d) The proposed project would not include any lighting, because park hours would be from sunrise to sunset, and the project restrooms would be locked at night. The project would not create any new sources of light or glare, and there would be **no impact**.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES : In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				\square
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			\boxtimes	
Comment to Questions				

a) The project site is comprised of vacant land that was farmed for over 100 years, beginning in the 1850s. Under the terms of a current lease agreement with Perry Farms Inc., about 115 acres of land located both north and south of Patterson Ranch Road are available to be farmed. However, because of the lack of a dependable irrigation water supply north of Patterson Ranch Road and poor soil conditions, only about 50 acres (south of Patterson Ranch Road) are suitable for farming. About 20 acres of land was farmed in 2016, but the land was fallowed in 2017 and 2018 because of a problem with the irrigation well. This land is farmed using certified organic farming methods. The existing lease with the farm operator expires in December of 2019, but can be renewed. Other areas of the project site, including the Western Wetlands Natural Unit, are no longer suitable due to poor soil conditions and deterioration of the former agricultural drainage system. The California Department of Conservation (DOC), which administers the Farmland Mapping and Monitoring Program (FMMP), updated its maps in 2008 for Alameda County, and changed the farmland designation for the project site to "Grazing Land" with a small portion designated as "Other Land".⁷ Because the project is not located on Prime Farmland, Unique Farmland, or Farmland

⁷ California Department of Conservation, Farmland Mapping and Monitoring Program, California Important Farmland Finder, available online at: https://maps.conservation.ca.gov/DLRP/CIFF/, accessed 2 May 2108.

of Statewide Importance, it would not convert such land to non-agricultural use. There would be *no impact.*

b) The project site is in an Open Space zoning class, which has the purpose "To permit limited but reasonable use of open lands while protecting the public health, safety and welfare from the dangers of seismic hazards and unstable soils; preserve the topography of the city that shapes it and gives it its identity; allow land to be used for agricultural production in its natural or as near natural state as possible; coordinate with and carry out regional, county, and city open space plans..."⁸ Because the project site is not zoned for agricultural use, the proposed project would not conflict with zoning for agricultural use. There would be *no impact.*

In 2013, a Deed Restriction and Declaration of Covenants was recorded by the Patterson Ranch property owner and the Park District, with the City of Fremont a designated third party beneficiary, to satisfy requirements of the Patterson Ranch Planned District to protect 102 acres of land for open space and agricultural purposes. The purpose of the Declaration is to prevent use of 102 acres of the area by actions that would permanently impair the site's agricultural values, and acknowledge that the site also has open space, scenic, recreational, ecological and natural habitat resources values ("Conservation Values"). The Declaration further states that the 102-acre area may be relocated elsewhere on the site, or elsewhere within Alameda County, subject to agreement. Activities consistent with the purpose of the Declaration include:

- Trails and signage
- Structure needed to preserve, maintain and enhance Agricultural and Conservation values
- Passive recreation, including but not limited to walking, hiking, horseback riding, biking, bird watching, and picnicking
- Restoration and enhancement of existing wetland areas including flood and/or habitat improvement
- Wildlife food plots
- Vegetation buffers along wetlands
- Cultivation of grasslands
- Grazing
- Use for educational purposes related to Agricultural and Conservation values
- Construction, installation, placement, repair and maintenance of underground utilities

Approximately 68 acres of the southernmost portion of the project area are subject to a Williamson Act contract entered into by the owners and the City of Fremont in 1976.⁹ The contract limits the use of this part of the property to agriculture and compatible uses. The portion of the site subject to the Williamson Act contract is located entirely within a larger, 136-acre area, also in the southern portion of the site, that is subject to an existing open space easement, which similarly limits the use of the property to agriculture and compatible uses. The 68 acres of land under Williamson Act Contract are located in the proposed project's Southern Wetlands Natural Unit. This previously farmed area would be restored to a mixture of wetlands and oak savanna by the Alameda County Flood Control and Water Conservation District as an independent project. Once fully functional, the lands would be turned over to the Park District to manage as part of Coyote Hills Regional Park. As part of the proposed project evaluated in this environmental document, the Park District would convert the maintenance access roads in this area into shared-use trails by the installation of signs, wildlife observation areas for use, gravel surfacing in some areas, and

⁸ Southern Alameda County GIS Authority, available online at: http://egis.fremont.gov/apps/public/, accessed 1 May 2018.

⁹ City of Fremont, Final Environmental Impact Report, Volume I – Modified Recirculated Draft EIR, State Clearinghouse #2007102107, Patterson Ranch Planned District, September 2010, page 4.2-4.

construction of a short connector trail and a new vehicular and pedestrian/bicycle bridge that can be used by service vehicles over Ardenwood Creek. Because these uses would not preclude future agricultural use of the 68 acres under Williamson Act contract, they would be compatible with agriculture. Therefore, the project would not conflict with the existing Williamson Act contract, and **no impact** would occur.

- c) As discussed in Section II.b, above, the project site is not zoned as forest land, timberland, or Timberland Production. The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or Timberland Production. *No impact* would occur.
- d) There is no forest land on the project site. There would be *no impact* on forest land.
- e) The project site has no forest land and would not involve changes that would result in conversion of forest land to non-forest use. As discussed in Section II.a, above, the project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, the project site contains land that is designated as Grazing Land. The proposed project would maintain the agricultural use of the Patterson Ranch Farm fields. The remainder of the project site would be maintained as open space, with habitat and wetland restoration. This would not preclude future agricultural use of the site, and therefore would not result in the permanent conversion of Farmland to non-agricultural use. This impact would be *less-than-significant*.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
III. AIR QUALITY : Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				\boxtimes
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			\square	
d) Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e) Create objectionable odors affecting a substantial number of people?			\boxtimes	

The project site lies in the Southwestern Alameda climatological sub-region of the Bay Area. The air pollution potential of this sub-region is relatively high in the summer and fall when regional winds can transport pollutants from other areas and where the confining terrain of the East Bay hills can concentrate them locally¹⁰. This sub-region contains numerous and varied stationary industrial/commercial air pollution sources and major regional roadways, including I-880, I-680 and State Route (SR) 84, which are also major pollutant sources. Several stationary industrial/commercial air pollution sources are clustered in the Ardenwood Technology Park east of the Paseo Padre Parkway across from the Project site. SR 84 passes less than a mile south of the Project site and Paseo Padre Parkway, a major local arterial and the Project site's main access route, runs along the eastern Project site boundary.

The Bay Area Air Quality Management District (BAAQMD) maintains a number of air quality monitoring stations and continually measures the ambient concentrations of major air pollutants throughout the Bay Area. The closest such monitoring station is at 40733 Chapel Way in Fremont, about 5 miles east of the Project site in central Fremont. Ozone (which is formed from precursors - reactive organic gases [ROG] and nitrogen oxides [NOX]) and inhalable/fine suspended particulate matter (PM₁₀ /PM_{2.5}) are monitored there, and exceedances of ozone and particulate ambient air quality standards have been recorded there in recent years¹¹. These are the primary air pollutants of concern when evaluating the air quality impacts on and by development projects in the Bay Area. Other toxic air contaminants (TACs) are also of concern regionally. In the Bay Area, the majority of the estimated carcinogenic/chronic health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from dieselfueled engines (DPM, almost all of which is also PM_{2.5}). The California Air Resources Board (CARB) has

¹⁰ Bay Area Air Quality Management District (BAAQMD). *California Environmental Quality Act Air Quality Guidelines*. May 2017.

¹¹ BAAQMD. Air Quality Summary Reports. http://www.baaqmd.gov/about-air-quality/air-quality-summaries

identified DPM as being responsible for about 70 percent of the cancer risk in California from airborne TAC exposures¹².

The Project site, about 300 acres of open space (part of the former Patterson Ranch) adjacent to and east of Coyote Hills Regional Park, is proposed for public access improvement, habitat restoration and annexation to the Park. The nearest air-pollutant-sensitive receptors, a single-family residential area, lies several hundred feet east of the Project site at its closest approach and just east of Ardenwood Boulevard.

The air quality analyses addressing the Initial Study air quality checklist items above were performed using the methodologies and significance thresholds recommended in *CEQA Air Quality Guidelines* (BAAQMD, May 2017, Table 2-1). The air pollutant emissions of the ozone precursors ROG and NO_x, and of PM₁₀, and PM_{2.5} are evaluated. Health risks associated with Project construction DPM emissions in the context of cumulative health risks from TAC emissions by existing local sources are also evaluated.

The analysis assumed that the Project applicant (Park District) would obtain a BAAQMD permit if required for construction and that fugitive dust control BMPs would be routinely implemented by the construction contractor in accordance with Park District construction standards and as contained in the applicable Project Construction Documents.

According to the *Guidelines*, any project would have a significant potential for contributing to a local air quality standard violation or making a cumulatively considerable contribution to a regional air quality problem if its pollutant emissions would exceed any of the thresholds presented in **Table AQ-1** during project construction or operation.

		Operational		
Pollutant	Construction Average Daily (lbs./day)	Average Daily (Ibs./day)	Maximum Annual (tons/year)	
Reactive Organic Gases (ROG)	54	54	10	
Oxides of Nitrogen (NO _x)	54	54	10	
Inhalable Particulate Matter (PM_{10})	82 (exhaust)	82	15	
Fine Inhalable Particulate Matter ($PM_{2.5}$)	54 (exhaust)	54	10	
PM ₁₀ /PM _{2.5} (Fugitive Dust)	BMPs ^a	N/A	N/A	

Table AQ-1: CEQA Air Quality Significance Thresholds for Air Pollutant Emissions

Notes:BMPs = Best Management Practices N/A = Not Applicable

^a If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.

Source: BAAQMD, CEQA Air Quality Guidelines (May 2017).

¹² California Air Resources Board (CARB). Summary: Diesel Particulate Matter Health Impacts. https://ww2.arb.ca.gov/index.php/resources/summary-diesel-particulate-matter-health-impacts

The *Guidelines* also establish a relevant zone of influence for assessment of project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a project site. Project construction-related or operational TAC impacts to sensitive receptors within the zone that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e. chronic or acute) hazard index greater than 1.0;
- An incremental increase of greater than 0.3 micrograms per cubic meter (μ g/m3) annual average PM2.5

Cumulative impacts from TACs emitted from freeways, state highways or high-volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day) and from all BAAQMD-permitted stationary sources to sensitive receptors within the zone of influence that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess cancer risk levels of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average PM_{2.5} concentrations greater than 0.8 μg/m3.
- a) In the Bay Area, the current applicable regional air quality plan is the BAAQMD's 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 Plan), which focuses on two closely-related goals: protecting public health and protecting the climate (the latter addressed in Section VII below). The 2017 Plan defines an integrated, multipollutant control strategy to reduce emissions of particulate matter, TACs, ozone precursors and greenhouse gases (GHG) based on four key priorities:
 - Reduce emissions of criteria air pollutants and TACs from all key sources.
 - Reduce emissions of "super-GHGs" such as methane, black carbon and fluorinated gases.
 - Decrease demand for fossil fuels (i.e., gasoline, diesel and natural gas).
 - Decarbonize the energy system.

The purpose of the Proposed Project is to improve public access and restore habitat on about 300 acres of adjacent land parcels east of the existing Coyote Hills Regional Park in southwest Alameda County. Thus, the Project would improve/expand regional parklands primarily to serve the recreational needs of Bay Area residents. It would not have the potential to substantially increase regional population, employment or transportation levels in Alameda County and the Bay Area, all of which are the bases of the 2017 Plan's regional emission inventories and the emission control policies they support. Thus, it would not impede attainment of 2017 Plan goals.

Also, compliance with all CEQA air quality significance thresholds are necessary conditions for determining that a project would not interfere with the attainment of air quality plan goals. As the analyses below under **Item b**, **Item c** and **Item d** demonstrate, the Project would not interfere with the 2017 Plan because it meets all CEQA limits on air pollutant emissions and their consequent health risks to the local population. Therefore, Project impacts to/conflicts with the 2017 Plan would be **less than significant**.

b) Project improvements to Park facilities and habitat restoration activities could occur over a three-year period (summer 2019 through summer 2021), or be spread out over more years depending on funding availability and capital project delivery capacity. During this time the Project would generate emissions of air pollutants in construction equipment exhaust and fugitive dust from equipment and material movement. The analysis described below assumed a worst-case (maximum daily emission) scenario in which all construction occurs over a three-year period. BAAQMD CEQA methodologies recommend

quantification of construction-related and operational emissions and comparison of those emissions to the CEQA significance thresholds. Thus, the California Emissions Estimator Model (CalEEMod, Version 2016.3.2, including, where appropriate, the independent use of its methodologies, as specified in its *User's Guide* Appendix A, and its default equipment emission rate tables, as specified in its *User's Guide* Appendix D) and the CARB's EMFAC on-road emission database were used for this purpose. ^{13' 14}

Table AQ-2 displays the estimated pollutant emissions from Project construction equipment and material delivery/haul trucks associated with Project access improvement and habitat restoration. The average daily construction emissions from this activity were compared to CEQA significance thresholds, which they do not exceed. Thus, the Proposed Project's construction related emissions would not substantially contribute to any existing air quality violation, and this impact would be *less than significant*.

-	Project Restoration Activity Emissions (average daily lbs.)				
Restoration Area/ Work Period	ROG	NO _x	Exhaust PM ₁₀	Exhaust PM _{2.5}	
All Areas/Year 2019	0.45	5.92	0.21	0.19	
All Areas/Year 2020	0.04	0.47	0.02	0.02	
All Areas/Year 2021	0.19	2.28	0.08	0.08	
BAAQMD Daily Threshold	54	54	82	54	
Exceeds Threshold?	No	No	No	No	

Table AQ-2: Air Pollutant Emissions from Project Public Access Improvements and Habitat Restoration.

Source: Based on Project restoration phasing and equipment use data, equipment pollutant emission rates provided by the CalEEMod model, and on-road motor vehicle pollutant emission rates provided by the EMFAC2014 model.

Fugitive dust from earth movement and travel over unpaved ground during Project improvement/restoration phases could lead to local violations of ambient particulate standards unless adequate dust suppression measures are implemented. For CEQA projects in the Bay Area, BAAQMD Guidelines require the implementation basic construction BMPs to control fugitive dust. These same BAAQMD Guidelines are included in the City of Fremont's Standard Development Requirements contained in Municipal Code Section 18.218.050. Through implementation of the following BMPs contained in Mitigation Measure AIR-1, potential fugitive dust impacts would reduced to a *less-thansignificant* level with implementation of the following mitigation measures.

Mitigation Measure

- AIR-1 The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:
 - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

¹³ California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model (CalEEMod) User's Guide*. http://www.caleemod.com/

¹⁴ CARB, EMFAC Web Database. https://www.arb.ca.gov/emfac/

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The EBRPD's phone number shall also be visible to ensure compliance with applicable regulations.

Table AQ-3 displays the estimated pollutant emissions from Project operational sources added by Project implementation, in this case the additional motor vehicle traffic associated with the operation of the larger Coyote Hills Regional Park. Both the average daily and total annual pollutant emissions in the first year after Project improvement/restoration work is complete (i.e., Year 2021) were compared to CEQA significance thresholds, which they do not exceed. Thus, the Proposed Project's net new operational emissions would not substantially contribute to any existing air quality violation, and this impact would be less than significant.

TABLE AQ-3: Air Pollutant Emissions from Operations after Project Public Access Improvements and Habitat Restoration.

	Project Operational Emissions (average daily lbs./maximum annual tons)				
Project Source/Year	ROG	NO _x	Total Tota PM ₁₀ PM ₂		
Motor Vehicles/Year 2022	1.46/0.07	8.80/0.49	4.49/0.2 4	1.24/0.0 7	
BAAQMD Daily Threshold	54/10	54/10	82/15	54/10	
Exceeds Threshold?	No	No	No	No	

Source: Based on Project restoration phasing and equipment use data, equipment pollutant emission rates provided by the CalEEMod model, and on-road motor vehicle pollutant emission rates provided by the EMFAC2014 model.

- c) As discussed in Item b above, Project construction and operational air pollutant emissions would be substantially below the CEQA emission significance thresholds. And as discussed below in Item d, Project TAC impacts would also be below the CEQA project-level risk/hazard thresholds and below the cumulative risk/hazard thresholds. Therefore, the Project would not make cumulatively considerable contributions to the Bay Area's regional problems with ozone and particulate matter, or to local cumulative TAC exposures. Thus, cumulative emission impacts would be *less than significant*.
- d) Cancer risk is the lifetime probability of developing cancer from exposure to carcinogenic substances. Following health risk assessment (HRA) guidelines established by the Office of Environmental Health Hazard Assessment (OEHHA) in Air Toxics Hot Spots Program Risk Assessment Guidelines (2015) and by the BAAQMD in Recommended Methods for Screening and Modeling Local Risks and Hazards (2012), incremental cancer risks are estimated by applying established toxicity factors to modeled TAC concentrations over a 70-year lifetime exposure. If the probability of cancer mortality is greater than 10 in

a million, then the impact is considered significant. Adverse health impacts unrelated to cancer are measured using a hazard index (HI), which is defined as the ratio of a project's incremental annual average TAC exposure concentration to a published reference exposure level (REL) as determined by OEHHA. If the HI is greater than 1.0, then the impact is considered to be significant. Both of these thresholds have been adopted by the BAAQMD Guidelines^{15/16}.

The potential for ambient DPM produced by diesel-powered construction equipment employed for Project improvement/restoration activities to substantially affect sensitive receptors within 1,000 feet of the Project site was estimated by using the SCREEN3 dispersion model. Project DPM cancer risk, chronic hazard and PM2.5 increments at the closest residential area to the Project site are as shown in **Table AQ-4**, all values far below the significance thresholds. Thus, project-level TAC impacts from Project construction equipment/vehicular DPM emissions would be less than significant ¹⁷.

According to the Google Earth mapping of BAAQMD stationary TAC source locations in southwestern Alameda County, there is a substantial cluster of TAC sources in the Ardenwood Technology Park just east of the Project site and just south of the nearest residential area. Also, Paseo Padre Parkway (with a 2010 daily traffic volume of about 11,000 according to the Fremont General Plan) would qualify as a substantial TAC source under BAAQMD criteria. TAC cancer risk, chronic hazard and PM2.5 increments from all such stationary sources and from Paseo Padre traffic were accessed from BAAQMD data files or estimated using the BAAQMD Roadway Screening Calculator, as shown in **Table AQ-4**. Thus, cumulative TAC impacts from Project and existing stationary/mobile sources contribute to local cancer risks and ambient PM2.5 concentrations that are low in comparison to the BAAQMD cumulative CEQA significance thresholds and their cumulative impacts would be less than significant ¹⁸⁻¹⁹⁻²⁰.

¹⁵ Office of Environmental Health Hazard Assessment (OEHHA). *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

¹⁶ BAAQMD. Recommended Methods for Screening and Modeling Local Risks and Hazards. May 2012.

¹⁷ Lakes Environmental, SCREEN View User's Guide.

https://www.weblakes.com/products/screen/resources/lakes_screen_view_user_guide.pdf

¹⁸ BAAQMD. Roadway Screening Analysis Calculator. http://www.baaqmd.gov/plans-and-climate/californiaenvironmental-quality-act-ceqa/ceqa-tools

¹⁹ BAAQMD. Stationary Source Screening Analysis Tool. http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools

²⁰ BAAQMD. Highway Screening Analysis Tool. http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools

TABLE AQ-4: Air Pollutant Emissions from Project Operation after Implementation of Public Access
Improvement/Habitat Restoration.

BAAQMD Plant #	Facility	Address	Cancer Risk	Hazard Index	PM _{2.5} Concentration			
From Local B	From Local BAAQMD-Permitted Stationary TAC Sources*							
20817	34175 Ardenwood Venture, LLC	34175 Ardenwood Blvd.	1.39	0.002	0.002			
20638	Boehringer Ingelheim Fremont Inc.	6397 Kaiser Drive	6.08	0.004	0.007			
18648	Zosano Pharma	34790 Ardentech Court	4.41	0.002	0.006			
12086	OMRON STI	6550 Dumbarton Circle	3.39	0.003	0.004			
20365	Peery/Arrillaga	6519 Dumbarton Circle	1.70	0.002	0.002			
From Major	From Major Local Roadways**							
Paseo Padre	Parkway (25 feet from curbsic	le)	10.07	< 0.01	0.198			
From Project	t Sources***							
	ovement/Restoration (i.e., TA bugh parcel, the only Project p e receptors)		0.05	< 0.01	0.01			
Project-Leve	Significance Thresholds		10	1.0	0.3			
Significant Pr	oject Construction Impact?		No	No	No			
From Cumula	From Cumulative Sources							
Worst-Case Cumulative TAC Impact****			27.04	0.013	0.219			
Cumulative S	ignificance Thresholds	100	10	0.8				
Significant Cu	umulative Impact?	No	No	No				

*Data from the BAAQMD's Stationary Source Screening Analysis Tool and Google Earth were used to estimate the maximum cancer risk, hazard index, and $PM_{2.5}$ concentration at maximum exposure receptor points very close to each TAC source. All stationary TAC sources are located in the Ardenwood Technology Park and are within 1000 feet of the closest residential areas north/east of Ardenwood Boulevard.

**The BAAQMD's Roadway Screening Analysis Calculator were used to estimate maximum cancer risks, hazard indexes, and PM_{2.5} concentrations at curbside. Daily traffic volumes on Paseo Padre Parkway were taken from the City of Fremont General Plan Mobility Element, Diagram 3-2, 2010 Traffic Volumes.

Project construction cancer risk, chronic hazard and PM_{2.5} increments were estimated by the SCREEN3 dispersion model using Project construction equipment TAC emission estimates from the CalEEMod model. *Table entries for each stationary and roadway source cancer risk, chronic hazard and PM_{2.5} increments are worst-case values at a receptor point close to each source; actual values at the closest residential receptor would be substantially reduced by TAC dispersion over the much greater source-receptor distances.

e) BAAQMD defines a significant odor impact as the frequent exposure of substantial populations to objectionable odors. The diesel-powered, exhaust-emitting equipment to be used for the proposed improvement/restoration work would work over large-area parcels that are far removed (i.e., by at least 1000 feet, often much greater) from existing residential areas where odor-sensitive populations could be frequently affected. Thus, odor impacts associated with the operation of diesel-powered equipment to be used for Project improvement/restoration work would be *less than significant*.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or Special Status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	\boxtimes			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	\boxtimes			
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	\boxtimes			
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	\square			

- a) The proposed project could have a *potentially significant* impact on Special Status species, which will be evaluated in the EIR.
- **b)** The proposed project could have a *potentially significant* impact on habitats, which will be evaluated in the EIR.
- c) The proposed project could have a *potentially significant* impact on wetlands, which will be evaluated in the EIR.
- **d**) The proposed project could have a *potentially significant* impact on fish and wildlife movement, which will be evaluated in the EIR.
- e) The proposed project could have a *potentially significant* on local policies and ordinances protecting biological resources, which will be evaluated in the EIR.
- **f)** The proposed project could have a *potentially significant* impact on habitat or conservation plans applicable to the site. This topic will be evaluated in the EIR.

Mitigation Measures

Mitigation Measures, if necessary, will be identified in the EIR.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:		Willgallon		
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	\boxtimes			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	\boxtimes			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	\boxtimes			
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	\boxtimes			

Comment to Questions

- a) The proposed project would disassemble the Contractors Residence a historic building. This is a *potentially significant* impact on historic architectural resources, and will be evaluated in the EIR.
- b) The proposed project would involve ground disturbance including grading and trenching on a site with known archaeological resources, including potential human remains. This is a *potentially significant* impact on archaeological resources, and will be evaluated in the EIR.
- c) The proposed project would involve ground disturbance including grading and trenching on a site underlain by the Franciscan Formation, which may contain fossil remains. This is a *potentially significant* impact on paleontological resources, and will be evaluated in the EIR.
- d) The proposed project would involve ground disturbance including grading and trenching on a site with known archaeological resources, including potential human remains. This is a *potentially significant impact* on human remains, and will be evaluated in the EIR.

Mitigation Measures

Mitigation Measures, if necessary, will be identified in the EIR.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				\boxtimes
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?				
ii) Strong seismic ground shaking?		\boxtimes		
iii) Seismic-related ground failure, including liquefaction?		\boxtimes		
iv) Landslides?				\boxtimes
b) Result in substantial soil erosion or the loss of topsoil?		\boxtimes		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		\boxtimes		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			\boxtimes	

- a. i. The project site is located in a seismically active area, the San Francisco Bay Area, which is located in the vicinity of the San Andreas Fault System at the margin between the Pacific Tectonic Plate and the North American Tectonic Plate. The San Andreas Fault System includes major active earthquake faults including the Hayward fault located approximately 6 miles northeast of the project site, the Calaveras fault 12 miles east, and the San Andreas fault 13 miles to the southwest. No active earthquake faults are known to cross the subject property, so that surface fault rupture is considered to have *no impact* to site use or improvements.
- a. ii Earthquakes which occur along or near one of the active earthquake faults in the region could impact the site due to the effects of strong seismic groundshaking. Peak ground accelerations at the project site are estimated to be on the order of 54% that of gravity (g) with a 10 percent chance of exceedence in a 50 year period. Ground accelerations of this magnitude could result in significant damage to unreinforced structures or buildings. Current Building Codes, including the 2016 California Building Code which has been adopted by the City of Fremont and County of Alameda, require new structures to be designed to resist the effects of strong seismic ground shaking. Repurposing existing structures for active use with human occupants could have a potentially significant impact if structures were to be damaged or fail during strong seismic ground shaking. New structures at the site should be designed in accordance with current California Building Codes. Repurposing of existing structures should include an evaluation by a Structural Engineer and may require retrofitting of structures with earthquake resistant measures. Strong ground shaking is considered to be *less than significant with mitigation*.

Incorporation of seismic construction standards and retrofitting of existing susceptible structures would reduce the potential for catastrophic effects of ground shaking, such as complete structural failure, and would reduce the impact of strong seismic ground shaking to a level of less-than-significant.

Implementation of Mitigation Measure GEO-1 would reduce the impact of strong seismic ground shaking to a level of *less than significant*.

a. iii. Another effect of seismic activity is the potential for seismic related ground failure, including liquefaction and dynamic densification. During and following strong seismic groundshaking, low density silty sand and poorly-graded sand deposits can undergo settlement. Liquefaction occurs when water saturated sand deposits lose strength due to a loss of pore pressure. Liquefaction settlement generally occurs gradually over the following days and weeks. Dynamic densification occurs when dry sand and silty sand deposits settle during strong seismic groundshaking.

According to maps prepared by the USGS, soils in the project area have a high to extremely high susceptibility to liquefaction due to seismic shaking. The Seismic Hazard Zones Map of the Newark Quadrangle (California Geological Survey, July 2, 2003) shows the site as being in an area where historical occurrence of liquefaction or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. A liquefaction analysis of project area soils was performed by TerraSearch Inc. in January 2008 in a report prepared for previously planned subdivisions. In their report, they estimated seismically induced settlement at the project area to be up to 8 inches. Across most of the project area, settlements of between 2 to 4 inches can be expected in the liquefiable layers. However, settlements of up to 5 inches can be expected in the northwestern most portion of the project area near Crandall Creek (K-line channel) and Ardenwood Creek (P-line channel), and up to 7 inches in the area near Patterson Ranch Road, identified as a possible old stream channel. Settlement of this magnitude could cause damage to existing and new structures, levees, parking facilities and other improvements at the project site. Project specific mitigation measures will be developed in accordance with requirements of the Public Resources Code.

Mitigation Measure GEO-2 would reduce the impact of seismic-related ground failure, including liquefaction, to a level of *less than significant*

- a. iv. The project area is located on nearly level (slope less than 2 percent) alluvial, with a relief of only about ten feet throughout the area. Natural slope instability does not occur at such low gradients. Landslides have **no impact** to site use or improvements.
- b. Proposed improvements to the site include grading of roads, trails, construction of new parking lot areas, pedestrian bridges, restroom, kiosk, utility trenching, rehabilitation of existing structures, possible removal of some structures, continued agricultural activities, wetlands restoration and areas of replanting. Areas to be graded and altered during construction and restoration activities could be subjected to soil erosion by wind and water. Site soils have a low erosion hazard due to their cohesiveness and gentle slopes. All projects that will disturb or alter more than one acre in area are subject to the requirement to reduce the potential impact of soil erosion by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) and Erosion Control Plan developed in accordance with permitting requirements with the State Water Resources Control Board. The SWPPP shall include Best Management Practices (BMPs) for control of soil erosion and sedimentation and shall be prepared by a Qualified SWPPP Developer (QSD). With the implementation of Mitigation Measure GEO-3, soil erosion or the loss of topsoil would be reduced to a level of *less than significant*.
- c. As discussed above in a. iii., the soils underlying the site are subject to the effects of liquefaction and could settle following strong seismic ground shaking. Lateral spreading could occur in areas with liquefiable soils located adjacent to a stream channel or slough, such as soils located adjacent to the Crandall Creek (K-line channel) and Ardenwood Creek (P-line channel). Project specific mitigation measures will be developed in accordance with requirements of the Public Resources Code. The impact of being located on a soil unit that is unstable or could become unstable and result in lateral spreading and liquefaction is considered *less-than-significant impact with implementation of Mitigation* Measures GEO-2 and GEO-4.
- d. Expansive soils are present at the project site area. Seasonal expansion and contraction of site soils could damage site improvements such as foundations, concrete slabs, pathways, and other pavement areas.

Expansive soils can be mitigated by including design measures such as removal and replacement with nonexpansive soils, segregating expansive soils from overlying improvements, lime-treating expansive soils to reduce the expansiveness, and increasing the thickness of non-expansive construction materials such as Class 2 Aggregate Base between the expansive soil and overlying concrete and hot mix asphalt improvements. The impact of expansive soils is considered *less-than-significant* with Mitigation Measures GEO-1 through GEO-4.

e. There are no planned on-site wastewater disposal systems at the project site. The planned restroom will be connected to the sanitary sewer system. The impact of soils incapable of supporting septic tanks or alternative wastewater disposal systems is *less-than-significant*.

Mitigation Measures

- **GEO-1** Strong Seismic Ground Shaking. Any construction built as a result of the implementation of the project shall meet requirements of the current California Building Code Vol. 1 and 2, including the California Building Standards, current edition, published by the International Conference of Building Officials, and as modified by the amendments, additions and deletions as adopted by the City of Fremont, California. Structures already present at the site and planned for reuse as part of the project should be evaluated for seismic stability in accordance with Fremont General Plan Policy 10-2.5: Removal of Susceptible Structures, and Implementation 10-2.5.A:Seismic Retrofit Programs.
- GEO-2 Seismic-related Ground Failure, including Liquefaction. Design-level Geotechnical recommendations shall be prepared for the Project under the direction of a California Registered Geotechnical Engineer, or Registered Civil Engineer experienced in geotechnical engineering. The Geotechnical recommendations shall be based on the information developed for the site and shall establish the seismic design parameters, as determined by the geotechnical engineer or civil engineer in accordance with requirements of the California Building Code, for improvements to the project site. The Geotechnical recommendations and design plans shall identify specific mitigation measures to reduce the liquefaction potential of surface soils in areas where liquefaction would pose a risk to health and safety in accordance with Public Resources Code Section 2693 (c).
- **GEO-3** Soil Erosion and Loss of Topsoil. In accordance with the Clean Water Act and the State Water Resources Control Board (SWRCB), the applicant for any construction projects that disturb more than one acre shall file a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of construction. The SWPPP shall include specific best management practices to reduce soil erosion. This is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).

Additionally, construction activities planned as a result of the implementation of the plan shall require an Erosion Control Plan to be submitted to the City of Fremont in conjunction with a Grading Permit Application. The Plan shall include winterization, dust, erosion and pollution control measures conforming to the California Stormwater Quality Association (CASQA) Best Management Practices handbooks, with sediment basin design calculations. The Erosion Control Plan shall describe the "best management practices" (BMPs) to be used during and after construction to control pollution resulting from both storm water and construction water runoff. The Plan shall include locations of vehicle and equipment staging, portable restrooms, mobilization areas, and planned access routes.

Recommended soil stabilization techniques include placement of straw wattles, silt fences, berms, and gravel construction entrance areas or other control to prevent tracking sediment off-site onto city streets and into storm drains, as well as hydroseeding or planting of all disturbed areas.

GEO -4 Unstable Geologic Units and Expansive Soils. Proper foundation engineering and construction of any structures built as a result of implementation of the project shall be performed in accordance with

the recommendations of a Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design. Geotechnical recommendations shall address zones of potentially liquefiable or expansive soil as they relate to proposed improvements and provide foundation, road pavement section, concrete slab-on-grade, utility construction and other recommendations to mitigate any zones encountered.

The structural engineering design shall incorporate seismic parameters as outlined in the current California Building Code. The Geotechnical recommendations shall establish the seismic design parameters, as determined by the geotechnical engineer in accordance with requirements of the current California Building Code.

		Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
	I. GREENHOUSE GAS EMISSIONS: Would the iject:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\square	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse			\boxtimes	

gases?

The most important and widely occurring anthropogenic greenhouse gas (GHG) is carbon dioxide (CO₂), primarily from the use of fossil fuels like coal, petroleum or natural gas. Also important GHGs are methane (CH₄), a principal component of natural gas, and nitrous oxide (N₂O). Fertilizer use and agriculture contribute substantial CH₄ and N₂O emissions, which are more potent than CO₂ as anthropogenic drivers of climate change. Other anthropogenic activities such as deforestation and other changes in land use contribute to rising atmospheric GHG levels.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, increased forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

Executive Order S-3-05 was established by Governor Arnold Schwarzenegger in June 2006 established the following statewide emission reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

AB 32, also known as the California Global Warming Solutions Act of 2006 designates the California Air Resources Board (CARB) as the State agency charged with monitoring and regulating sources of emissions of GHGs. Under AB 32, the State board is required to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG emissions reductions. The law establishes periodic targets for reductions, and requires certain facilities to report emissions of GHGs annually.

The BAAQMD *CEQA Air Quality Guidelines* provide CEQA thresholds of significance for operational GHG emissions from land use projects: 1) 1,100 metric tons of CO2e per year; or 2) 4.6 metric tons of CO2e per year per project "service population" (i.e., project residents + project employees), which are also considered the definition of a cumulatively considerable contribution to the global GHG burden and, therefore, of a significant cumulative impact. The BAAQMD has not defined thresholds for project construction GHG emissions. The *Guidelines* methodology and thresholds of significance have been used in this Initial Study's analysis of potential GHG construction <u>and</u> operational impacts associated with the Project.

a) The California Emissions Estimator Model (CalEEMod, Version 2016.3.2) model was used to quantify GHG emissions associated with Project construction activities and new operational sources. The Project's estimated improvement/restoration activity GHG emissions would be at its maximum annual total during the year 2019 (about 131 metric tons) with substantially lesser amounts in the subsequent two years (about 14 metric tons in 2020 and about 63 metric tons in 2021).

After completion of the proposed improvement/restoration work, net new operational GHG emissions would come primarily from the additional motor vehicles transporting increased numbers of visitors to the expanded Park. In the first year of operation after expansion, such motor vehicles would emit about 284 metric tons of GHG. Since both construction and operational GHG emissions are below the CEQA GHG significance threshold, GHG emissions associated with the Project would be **less than significant**.

Energy

Construction of the proposed project would require energy use by construction equipment. Project construction would employ modern equipment that complies with all applicable energy standards, and could be served by existing local and regional energy supplies, without substantially affecting peak and base period demands for electricity. For these reasons, construction energy use would not be wasteful or inefficient. Project construction would not require new or expanded electric power, natural gas, or telecommunications facilities.

Energy used during construction of the project would allow improvements to the San Francisco Bay trail along Ardenwood Boulevard and Paseo Padre Parkway, which could increase trail use for non-motorized transportation and result in a reduction of long-term energy consumption.

Operation of the proposed recreational project, which would occur from sunrise to sunset, would have directly consume a modest amount of energy. There would be a relatively small increase in visitor use and vehicle trips after construction of the project. To the extent that the Project's nearby recreational facilities attract visitors that would otherwise travel to more-distant parks and recreational facilities, there would be a net reduction in energy use for these vehicle trips. In any case, the Project's indirect transportation-related energy use during operation would not be large. Project operation would not require new or expanded electric power, or natural gas, or telecommunications facilities.

No features of the Proposed Project would conflict with or obstruct state or local plans for renewable energy or energy efficiency. The project would not require the relocation or construction of new or expanded electric power or natural gas facilities.

For these reasons, the impact of the proposed project on energy would be less than significant.

b) By meeting the CEQA significance thresholds, the Project would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions in California and the Bay Area and, thus, would have a **less than significant** impact.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		\square		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				\boxtimes
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				\square
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			\boxtimes	

- a) The proposed project is a park development plan that would not involve the transport, use or disposal of substantial quantities of hazardous materials. No hazardous materials would be stored in the project area in support of the project, other than typical consumer-related products, such as cleaning solvents. Most of these materials would be consumed during use. The limited amounts of hazardous materials would be labeled to inform users of potential risks and to instruct them in appropriate handling, storage, and disposal procedures. None of the proposed uses are associated with the routine transport of substantial quantities of hazardous materials that could spill and create a significant hazard to the public or the environment. This impact would be *less than significant*.
- A report on hazardous materials at the project site was conducted by TRC, an independent consultant.²¹
 The report was based on technical studies prepared by others, including a Site Characterization
 Report/Preliminary Endangerment Assessment (conducted in 2008), a Human Health Risk Assessment

²¹ TRC, Existing Conditions Summary Report, Hazardous Materials, Patterson Ranch Habitat Project, Fremont, California, prepared for East Bay Regional Park District, c/o Questa Engineering Corporation, April 2017.

(2013), a Phase I Environmental Site Assessment (ESA) (2014), a Deed Restriction and Declaration of Covenants for the site (2014), and soil sampling and testing in the Southern Wetland Natural Unit at the project site (2015). The conclusions of the TRC report are discussed below.

Based on the Site Characterization Report/Preliminary Endangerment Assessment conducted in 2008, TRC determined that detected heavy metal concentrations in the samples tested, including arsenic, were consistent with published background levels and not a result of historical operations at the site. Detected hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs) did not exceed applicable background or screening levels. Due to the historic agricultural crop production at the site, residual organochlorine pesticide concentrations, including but not limited to toxaphene and dieldrin, were present in surface and near-surface soil. Toxaphene and dieldrin were detected in the upper 12 inches of soil at various locations across the site at concentrations that exceed residential criteria.

Organochlorine pesticides are known to degrade, over time, into benign substances. Soil samples from the Southern Wetland Natural Unit at the project site were tested in 2015, seven years after the test results discussed above. TRC determined that none of these detected organochlorine pesticide concentrations exceeded respective Los Alamos National Laboratory (LANL) ecological screening benchmarks (ECORISK Database), which were selected as a screening tool because no California ecological screening levels have been established for the full range of pesticides detected at the site. Because organochlorine pesticide residues throughout the project site result from the same historic agricultural crop production, it is likely that the conclusions for the Southern Wetland Natural Unit are applicable to the remainder of the project site, and that current pesticide concentrations in the Western Wetlands Natural Unit, proposed for restoration, also do not exceed LANL benchmarks. However, the soils in the Western Wetlands Natural Unit should also be tested to verify LANL benchmarks for soil and/or sediment are not exceeded.

During project construction (earthmoving and grading), construction workers may be exposed to contaminated soil, which could affect their health. Workers would disturb soils potentially contaminated with agricultural chemicals, releasing them locally in dust in the air, absorbing them through respiration, and physically coming into contact with contaminated soils, potentially absorbing them through contact. After construction, likely ecological receptors, including insectivorous birds and mammals, could be exposed to excessive levels of pesticide residues. The impact of contaminated soils on construction workers and ecological receptors would be reduced to a *less-than-significant* level with implementation of Mitigation Measures HAZ-1 through HAZ-6.

Improperly decommissioned and/or abandoned groundwater wells can act as direct conduits to groundwater for agricultural wastes or other pollutants that are washed down with stormwater runoff. There are eight known or suspected abandoned and nonfunctioning wells within the park expansion project area, or immediately adjacent to it. Some of the abandoned wells have no surface infrastructure, such as a standpipe or pump, and are difficult to locate in the field. Their approximate locations are based on Alameda County Water District (ACWD) records. As part of the proposed project, the Park District would coordinate with ACWD to confirm the location of abandoned wells, identify any previously unknown abandoned wells, and develop and implement plans to destroy these abandoned wells following applicable ACWD permitting regulations and destruction guidelines. Well destruction would involve pulling well pumps and casings and any aboveground stand pipes and grouting the wells closed. These measures, which are part of the proposed project, would reduce the impact of abandoned wells to a *less-than-significant* level.

A Site Characterization Report/Preliminary Endangerment Assessment (PEA) conducted in 2008 found asbestos in the sheetrock of the structures on the project site, which include the Farm Labor Contractors

residence.²² A building inspection report conducted in 2016 also found asbestos in various building materials.²³ In addition, the 2016 building inspection report found detectable levels of lead-based paint on the Contractors residence and other structures on the site. Disassembly of the Labor Contractors residence, or other structures on the project site, could expose workers and visitors to hazardous levels of airborne asbestos and lead-based paint. Implementation of Mitigation Measure HAZ-6 would reduce the impact of asbestos and lead-based paint to a less-than-significant level.

The historic Contractors Residence and the now-demolished Farm Labor Housing buildings on the site were constructed with septic tanks and leachfield wastewater disposal systems. As part of the proposed project, and in accordance with Alameda County Onsite Wastewater Treatment System Code, Section 9, these systems would be field-located, abandoned, and destroyed. This would involve removing the septic tank lid, pumping the tank chambers, perforating the tank bottom, and backfilling the tank with pea gravel or drain rock and topsoiling. Leach lines normally do not need to be removed. This work, which would be done under a County-issued permit, and is proposed as part of the project, would reduce the impact of septic tanks and leachfield wastewater disposal systems to a *less-than-significant* level.

- c) The project area is within 0.25 mile of an existing school site. The closest school to the project area is the Delaine Eastin Elementary School, located at 34901 Eastin Drive, approximately 2,000 feet north of the project area. The proposed project's recreational and open space uses would not entail the routine use, transport, or disposal of hazardous materials as part of its operations. However, as discussed in Section VII.b, above, hazardous levels of organochlorine pesticides and asbestos-containing building materials on the project site may be disturbed by project construction. Implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, HAZ-4, HAZ-5, and HAZ-6 would reduce the impact of contaminated soils and asbestos-containing building materials on nearby schools to a *less-than-significant* level.
- d) The project area is not located on or near a site listed in federal or state databases of major hazardous release sites (e.g. Superfund sites), pursuant to Government Code Section 65962.5.²⁴ There would be **no** *impact*.
- e, f) The project area is not located in an airport land use plan or in the vicinity of a public or private airport and therefore would not create impacts associated with airplane traffic. There would be *no impact*.
- g) The project would not impair implementation of, or physically interfere with, an adopted emergency response or evacuation plan. The project would not affect the functionality of existing emergency evacuation routes, nor would project traffic be expected to adversely impact a designated evacuation route. Thus, the project would not impede implementation of the City of Fremont's Disaster Management Operations Plan (DMOP). The project would also not involve the establishment of an evacuation route. As such, the project would not alter an existing emergency response plan or evacuation route and therefore would not impact existing emergency procedures. This impact would be *less-thansignificant*.
- h) The expansion area is bordered on the west by Coyote Hills Regional Park, on the north by Alameda Creek, on the east by Paseo Padre Parkway and existing and planned development, and on the south by undeveloped privately-owned land. The LUP Amendment proposes new visitor facilities including entry

²² City of Fremont, Final Environmental Impact Report, Volume I – Modified Recirculated Draft EIR, State Clearinghouse #2007102107, Patterson Ranch Planned District, September 2010, Section 4.9 Hazards and Hazardous Materials.

²³ Hazard Management Services, Inc., Letter Report to Karla Cuero, Project Coordinator, East Bay Regional Park Dis-

trict, Octobwe 11, 2016.

²⁴ California Department of Toxic Substances Control, EnviroStor database, available online at:

http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE &status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST, accessed 27 April 2018.

kiosk, restroom, parking lot, and picnic area, and re-use of the existing Milk House, which could potentially result in an increased risk of wildland fires to people and structures.

Coyote Hills Regional Park is adequately served for fire suppression by the Fremont Fire Department, which is able to meet its performance standard to respond to emergency calls at the Park.

The project site is not classified as a very high fire hazard severity zone in state or local responsibility areas, as defined by the California Department of Forestry and Fire Protection (CAL FIRE).²⁵

The project site would be added to the existing Coyote Hills Regional Park and managed by the East Bay Regional Park District, which maintains a program of fire prevention and suppression, and would continue to coordinate these efforts, including grassland vegetation management activities like goat and sheep grazing and prescribed burns, to help control the build-up of flammable vegetation at the project site.

EBRPD would monitor weather and fire conditions to aid in preventing wildfires, and could temporarily close Coyote Hills Regional Park, including the expansion area, in especially dry and windy conditions. All new Park District facilities would include on-site fire protection, like alarms and sprinkler systems, in accordance with City codes.

The Park District's program of fire prevention and suppression at the Park is primarily accomplished through goat and sheep grazing. In grassland areas, goat and sheep grazing has been effective at reducing the volume of dried plant material, which acts as fuel, to fire-safe levels. Fuel reduction in the Park can reduce the probability that a wildfire, if ignited, would burn uncontrolled or move off the site, and reduce the risk posed by wildfire to people, property and other resources. In addition, by reducing the volume of fuel, the intensity of a fire entering a grazed area can be reduced, which may increase firefighters' ability to control the fire.

In areas where grazing is unable to achieved desired results, the Park District may use prescribed burning. EBPRD incorporates fire-safety measures into its prescribed burn operations to minimize the potential that a controlled burn would expose people or structures to significant risk. The EBRPD Fire Department conducts at least six prescribed burns every year on its property, including several hundred acres of summer and fall grassland burns. Burns are designed to meet specific land management objectives, such as fire hazard reduction, grassland restoration, or reduction of non-native or pest plant species occurrence. All prescribed burns are conducted under controlled conditions and during weather conditions that are conducive to smoke dispersal.

Prior to conducting a prescribed burn for a particular site, the EBRPD Fire Department writes a burn plan which is reviewed and approved by the Park District's Operations and Planning and Stewardship Departments, as well as by the California Department of Forestry and Fire Protection and the Bay Area Air Quality Management District. Each plan includes a detailed project description including: the fuel type to be burned, required weather prescription, detailed site map, firing techniques, smoke management plan, list of fire department resources needed during the burn day, and public notifications and safety considerations.

Prior to burning, existing control lines, such as paved roads and fire roads, are enhanced with temporary control lines. Personnel used to supervise the burn, perform the actual firing, staff the fire engines, and control and extinguish the flames are all fully trained and briefed. Smoke production and weather

²⁵ California Department of Forestry and Fire Protection, *California Fire Hazard Severity Zone Map Update Project*, available online at: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps, accessed 30 April 2018.

conditions are continuously monitored throughout the burn, and all burning material is completely extinguished at the end of each day. These fire-safety measures are followed for every prescribed burn.

The proposed Project would not result in substantial impacts to emergency access. It would not create new barriers to emergency vehicles. The Project would provide additional site access with new bicycle and pedestrian facilities that can be utilized by emergency vehicles, but these facilities would not exacerbate fire risk. Emergency access on existing streets within and adjacent to the site would not be affected. The project site does not have substantial slopes, prevailing winds, or other factors that would exacerbate wildfire risks and thereby expose visitors to substantial pollutant oncentrations from wildfire. Because there are no substantial slopes on the project site, there would not be a significant risk due to post-fire slope instability or drainage changes.

With inclusion of the project site into Coyote Hills Regional Park and implementation of the Park District fire management measures discussed above, the impact of wildfire intensity and risk would be reduced to a *less-than-significant* level.

Mitigation Measures

- HAZ-1: Soil Testing and LANL Benchmarks. The Park District shall conduct sampling and testing of surface and near-surface soils in the areas of the Western Wetlands Natural Unit that are proposed for wetland restoration. The sampling and testing program shall include concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene. The test results shall be compared to the ecological screening benchmarks for soil and sediment (ECORISK Database) developed by Los Alamos National Laboratory (LANL). If no samples exceed the respective LANL benchmarks, no further mitigation is required.
- **HAZ-2: Ecological Risk Assessment.** Using the results of testing for organochlorine pesticides from Mitigation Measure HAZ-1, the Park District shall conduct a focused ecological risk assessment to evaluate the effects of known concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene, relative to likely ecological receptors at the site, particularly insectivorous birds and mammals. If the predictive ecological assessment identifies significant risk, Mitigation Measures HAZ-3, HAZ-4, and HAZ-5 shall be implemented. If the predictive ecological assessment does not identify significant risk, no further mitigation is required.
- **HAZ-3:** Site-Specific Health and Safety Plan. If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, a Site-Specific Health and Safety Plan for construction workers shall be prepared by the Park District and approved by an industrial hygienist prior to the start of any earthmoving activities associated with the alternative remediation strategies. The site-specific Health and Safety Plan shall be implemented by the Construction Contractors during remediation work. The Site-Specific Health and Safety Plan shall be prepared in accordance with the California Division of Occupational Safety and Health (CAL/OSHA) Standards identified as part of Title 8 of the California Code of Regulations.
- HAZ-4: Site-Specific Air Quality Monitoring Plan. If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, an Air Quality Monitoring Plan shall be prepared by the Park District and approved by the California Department of Toxic Substances Control (DTSC) and/or other regulatory oversight agency or agencies reviewing the remediation of the project area, prior to the start of any earthmoving activities associated with remediation strategies. The Air Quality Monitoring Plan shall be implemented by the Construction Contractors during remediation work in order to prevent toxic dust in the air from reaching levels that are hazardous to the workers and/or surrounding residents.

The Air Quality Monitoring Plan shall be prepared in accordance with the CAL/OSHA Standards identified as part of Title 8 of the California Code of Regulations.

HAZ-5: Soil Remediation. Contaminated soil shall be excavated and disposed offsite at a permitted Class II or Class III disposal facility, if required. Alternatively, soils with very low levels of contamination that do not pose a human health risk could be used beneficially as fill below paved parking areas or areas that receive aggregate base as a capping. Remediation shall include confirmation samples from excavations within remedial areas to limit the volume removed and verify that identified contaminated soil has been removed from the site. Adequate dust mitigation measures during excavation shall be implemented, and may include, but are not limited to, application of water and dust suppressants helps to control airborne particles, restrictions and/or limits to soil movement procedures, use of personal protective equipment (PPE), respirators, and decontamination procedures to reduce potential exposure to and spreading of contaminants. Truck cleaning shall include dry brushing after loading and using wheel grates to knock off excess dirt upon exiting the site. Soil loads in trucks shall be wetted slightly, leveled, and covered to minimize soil falling onto roadways. Transportation routes, times of work, and dust controls shall be chosen to reduce impacts to residential and other sensitive areas during removal and transport over public right-of-way (ROW). Remediation shall be conducted in coordination with, and approval of, the California Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB), should testing indicate soil contamination at levels requiring remedial action.

> Asbestos and Lead-Based Paint. For the Labor Contractors residence and any other HAZ-6: structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potentially friable asbestoscontaining building materials (ACBMs) in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition that may disturb the materials, by a contractor registered with Cal/OSHA as an asbestos abatement contractor. The contractor performing abatement shall hold the C-22 asbestos abatement license or a B-class general license with asbestos certification. Because asbestos-containing materials on the project site are likely to become friable during demolition, all such materials must be abated prior to demolition. All demolition and disassembly activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. All friable asbestos materials, and any non-friable materials that may become friable during abatement, shall be disposed of as hazardous (regulated) asbestos-containing material. Non-friable materials that are not made friable may be disposed of as non-hazardous asbestoscontaining material. A 10-day notice of planned asbestos removal and disposal shall be given to the Bay Area Air Quality Management District (BAAQMD), along with a notification of demolition of structure(s). The local office of the State Occupational Safety and Health Administration (OSHA) shall be notified at least 24 hours prior to abatement activities.

> For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potential lead-based paint. Personnel must have lead training sufficient to meet the requirements of Cal/OSHA, 8 CCR 1532.1. The workers shall use lead-safe work practices when handling paints with any detectable amount of lead. A containment area shall be used to prevent the buildup of lead dust on remaining surfaces, in compliance with California Department of Public Health requirements. All waste streams created as part of the project shall be profiled or characterized prior to disposal, and packaged as applicable, in compliance with the requirements of the California Department of Toxic Substances Control and Title 22.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?		\boxtimes		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		\boxtimes		
f) Otherwise substantially degrade water quality?		\boxtimes		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\boxtimes
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		\boxtimes		
 i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? 		\boxtimes		
j) Inundation by seiche, tsunami, or mudflow				\boxtimes

a) The Project area includes four local waterways; Ardenwood Creek on the south, Patterson Sough, Crandall Creek on the north, and the regional Flood Control channel- Alameda Creek Flood, off site to the immediate north. Patterson Slough, Ardenwood Creek and Crandall Creek all drain downstream through Coyote Hills Regional Park to Alameda Creek, which discharges to South San Francisco Bay. Earthwork and grading activities for construction of the proposed Project Recreation and Visitor Serving facilities such as the 100 car and 20 car parking lots, the restroom and picnic area, would impact approximately 3 acres in the Ranch Road Recreation Unit and in the Farm Yard area. Approximately 4 miles of new trail construction would also disturb approximately 5 acres of land in all of the Natural and Recreation Units. An additional approximately 47 acres would be disturbed for construction of the ACFCWCD Wetlands Mitigation project in the Southern Wetlands Natural Unit. Approximately 202 acres of the remainder of the 306 -acre Park expansion property would be disturbed associated with the habitat restoration and enhancement work. This includes clearing and grubbing, selective removal of invasive weed seed containing topsoil, grading of shallow seasonal wetlands, selective topsoil and compost placement, and drilling shallow, small diameter holes for native tree and shrub planting and restoration throughout the remaining project area. Because of favorable soil and shallow groundwater conditions, the restoration work would not require extensive grading or alteration of hydrologic conditions.

Grading and construction of the proposed project could cause short-term, potentially significant impacts to water quality if sediment-laden runoff, fuel or other construction chemicals are not adequately controlled, and are accidentally or unintentionally released into these waterways. This is a *potentially significant impact*.

Implementation of Mitigation Measures HYDRO-1, HYDRO-2, and HYDRO-3 would reduce these potential impacts to a *less-than-significant* level.

b) The Project Area lies within the Niles Cone Groundwater Basin, a major water source for the Alameda County Water District. The Project area includes two (2) groundwater wells that mainly draw water from the upper or Newark aquifer that could be used for temporary irrigation for habitat restoration, along with continued farm field irrigation. There are also an estimated eight (8) abandoned wells within the Project area or immediately adjacent to it. Grading and construction activities that damage wells can impact groundwater by causing down well leakage of poorer quality near surface water to lower and better quality, deeper aquifers

The Park District will work with the Alameda County Water District (ACWD) to find and destroy abandoned wells on the site according to ACWD specifications. This would involve removing the well pump and any above ground infrastructure, pulling casing, and grouting or sealing closed the well bore hole.

The project site also may contain abandoned septic tanks and leach fields associated with historic farm buildings that have since been demolished. Any such tanks would be located and removed per Alameda County Onsite Wastewater Treatment System Code, Section 9, as part of proposed site demolition work. This would involve removing septic tank lids, pumping tank chambers, perforating tank bottoms, backfilling the tanks with pea gravel or drain rock, top-soiling, composting or backfilling any depressional areas created by the work and revegetating the disturbed soil surface. Leach lines normally do not need to be removed. This would be done under a County Environmental Health Department-issued permit.

If the abandoned well destruction, drilling for construction of piers and construction piling, or the closure of septic tanks were not completed or were poorly completed, groundwater quality could be adversely impacted. This represents a *potentially significant impact*.

Irrigation for native tree and plant establishment and associated habitat management work would be conducted over a 3-year period. Total annual irrigation volumes are estimated to be less than 3.0- to 4.5 acre-feet of water.

Source of irrigation water for habitat restoration would be the existing agricultural irrigation well located in the farm field south of Patterson Ranch Road and/or recycled water, if available. This historic irrigation water source would also continue to be used to irrigate the approximately 20 to 50 acre farm fields in the Historic Patterson Ranch Farm Agricultural Unit. Agricultural irrigation is considered to be an on-going and approved water use (an existing condition) and is not a part of the Project for CEQA review purposes. For comparison purposes, typical agricultural crop water usage in this area ranges from about 2.0 to 2.5 acre feet of water annually, per acre. If the 50 acres of land in the Agricultural Unit were irrigated, total annual irrigation water use would be about 100 to 125 acre feet of water, drawn from the deep aquifer. Historically over 150 acres of land were irrigated for crop production on Patterson Ranch, estimated to use over 300 to 375 acre feet of groundwater, annually. Considering the small amount of groundwater needed for restoration plant establishment as compared to historic agricultural uses it is unlikely that this will substantially deplete groundwater, result in a net deficit in aquifer volume, lower the local groundwater table, or interfere with nearby wells. This is a *less than significant impact*.

Implementation of Mitigation Measures HYDRO-4 and HYDRO-5 would reduce potential groundwater related impacts to a *less than significant* level.

c-d) As part of the ongoing Phase 1 of the Line P/ Ardenwood Creek Flood Control and Wetlands Mitigation Project to be constructed in cooperation with Alameda County Flood Control and Water Conservation District, the Project would excavate and disturb approximately 47 acres in the Southern Wetlands Natural Unit. Excavation depth would be three (3) to four (4) feet to create an approximately 30-acre detention basin and associated wetlands. Flood water above the 2-year flood level would be diverted from Ardenwood Creek into the detention basins during flood events via gate controls. An existing agricultural drainage ditch at similar bottom depth elevations would be incorporated into the basins. The floodwater would be temporarily stored and then released back into Ardenwood Creek for downstream discharge once flows in Alameda Creek recede. The temporary detention basins would also provide wetland habitat, aquifer recharge, and de-silting and sediment deposition of diverted floodwaters.

Local alteration of the Ardenwood Creek channel to include physical connection to the 2 flood detention basins, and associated flood flow diversion and temporary storage is considered to have beneficial impacts on flooding and siltation, and is therefore a *less than significant* impact.

- e-f) The proposed project includes construction of the following impervious surface areas:
 - Approximately 160,000 square feet of new and relocated paved multi-use trail ²⁶
 - Approximately 88,000 square feet of reconstructed/elevated paved multi-use trail ²⁷
 - Approximately 40,000 square foot, 100-car paved parking lot
 - Approximately 10,000 square foot 20-car paved parking lot.

In addition to these impervious surfaces, the proposed project includes the following unpaved or semipervious surfaces:

- Approximately 17,000 square feet of unpaved trails (footpaths)
- Approximately 101,500 square feet of gravel multi-use trail
- Approximately 40,000 square feet unpaved open-use recreation/staging area

Existing site runoff does not currently drain into a urban storm-drain or storm-sewer system. All of the project access roads and trails would be out-sloped and designed to disperse runoff locally, and not concentrate flow. The proposed 100-car and 20-car parking lots would be designed to route runoff from impervious surfaces through bioswales and rain garden areas prior to release via dispersed flow to adjacent grassed and landscaped areas. However, unless properly designed and constructed, increased runoff from impervious and semi-pervious surfaces could overwhelm local stormwater conveyance systems and cause local flooding problems. This is a *potentially significant impact*.

Grading and construction activities that disturb soils and are not properly stabilized could cause increased turbidity in surrounding surface waters. Disturbed and exposed surfaces would be susceptible to the erosion forces of wind and water and could result in the degradation of water quality in Patterson Slough,

²⁶ A small portion of this is relocated Tuibun Trail in the vicinity of the proposed parking lot.

²⁷ Most of this is relocation of existing paved trail west of existing kiosk and represents a small net increase.

Ardenwood Creek, Crandall Creek, and downstream water bodies in the adjacent Coyote Hills Regional Park.

The proposed Project includes measures to minimize erosion and water quality degradation. However, If improperly designed, constructed, and maintained, implementation of the proposed Project would result in short-term and long-term increases in erosion and subsequent degradation of water quality. This is a *potentially significant impact*.

Implementation of Mitigation Measure HYDRO-6 along with previous Mitigation Measure HYDRO 1 and HYDRO-2 would reduce potential runoff related impacts to a *less than significant* level. *See Mitigation Measures HYDRO-1* and *HYDRO-2* in Section a).

- g) The Project proposes no housing construction; therefore there is *no impact*.
- h-i) The Proposed Project includes the installation of four (4) new bridge crossings over streams or drainage systems that have or are located near FEMA-designated floodplains and floodways. The proposed 80-foot Ardenwood Creek bridge would be part of the Tule Loop Trail and would provide vehicular and pedestrian access across Ardenwood Creek just west of the Southern Wetlands Natural Unit. The creek in this area and the downstream J Ponds area would be improved for flood conveyance by ACFCWCD as part of the Phase 2 Line P Flood Control and Restoration project. The proposed bridge would be designed to clear span the creek channel. A 20-foot long footbridge is proposed over a ditch located along the southern or outboard toe of the Crandall Creek Levee near the Patterson Ranch Slough Natural Unit. Alternatively this ditch could be culverted to provide the footpath section and connection to the existing Crandall Creek trail.

As a result of the recently completed Ardenwood Creek (Line P) Flood Control and Habitat Restoration Project, the 100-year flood flow is now contained within Ardenwood Creek within the project area, its designated channel bypass area, and flood detention structures. 100-year flood flows are also entirely contained within the leveed channel banks of the Alameda Creek Flood Control Channel.

The Crandall Creek south levee has not been certified by FEMA as being structurally stable or having the required three feet of freeboard above projected 100-year flood levels. According to FEMA floodplain mapping for this area, 100-year flood flows could potentially erode, or overtop the south channel bank levee of Crandall Creek (Line K) within the project area, causing possible shallow flooding. Flooding depths and flood flow velocities are expected to be minimal and would flood fallow local agricultural fields and open space habitat areas. The proposed footbridge constructed near the Crandall Creek Levee would be designed to be resilient to overtopping, minimize flood flow erosion, and to not cause scour or erosion to the adjacent levees. As floodwater would flow into open space, there is no threat or risk to buildings or structures from shallow flood flow diversion. Footbridges would be closed by park staff if flood events impact public safety and reopened after flood waters recede.

An approximately 100-foot long bridge would also be constructed along the northern edge of the DUST Marsh, reconnecting the eastern portion of the DUST Trail with the western end of the Crandall Creek Trail. This connection was previously a seasonal pathway that has become un-passable. The bridge would be located on Park District property.

A 550-foot pedestrian walkway cantilevering off of the existing Ardenwood Blvd. bridge over the Alameda Creek Flood Control Channel is also being evaluated as a part of this CEQA document.

Final bridge plans have not been prepared for any of the proposed bridge structures. All bridges would be designed so that the bottom cord of the bridges clear the 100-year flood elevation by a minimum of 1-foot, if required by applicable City of Fremont and Alameda County flood management regulations. All

structures would be designed so that none of the bridge or boardwalk structures affect local floodwater elevations, block or divert flood flows, or cause local scour or channel and levee instability problems. However if of the bridges, are improperly designed and constructed, they could cause or contribute to local flooding problems. These represent *potentially significant impacts*.

Implementation of Mitigation Measure HYDRO-7 would reduce potential flooding related impacts to a *less than significant* level.

j) The Project area is not in a tsunami inundation zone, an area susceptible to seiche or mudflows, therefore there is **no impact**.

Mitigation Measures

- **HYDRO-1:** Soil Erosion Control and Revegetation Plan. The Park District shall prepare a Soil Erosion Control and Revegetation Plan that addresses temporary construction-related temporary erosion control and provides permanent erosion control through revegetation and other means. The Plan, which can be a part of the project SWPPP see (HYDRO-2) shall be incorporated into the Project's Construction Documents. The Construction Plans shall specify erosion and sediment control measures, including Best Management Practices (BMPs) to control short-term construction-related water quality impacts. BMPs shall include at a minimum the following measures (where applicable):
 - Limiting access routes and stabilizing access points. Surface disturbance of soil and vegetation shall be minimized; existing access and maintenance roads shall be used wherever feasible.
 - Stabilizing graded areas as soon as possible following completion of disturbance with seeding, mulching, and installation of erosion control materials such erosion control blankets and straw rolls, or other approved and effective methods. Only native seed and plant materials shall be used, unless otherwise approved by the Qualified Biologist.
 - Delineating clearing limits, easements, setbacks, environmentally sensitive areas, and drainage courses by marking them in the field, and installing exclusion fencing, silt fencing, and/or coir logs or straw rolls.
 - Stabilizing and preventing sediment from entering temporary conveyance channels and stormdrain outlets.
 - If rainfall is expected to occur, using temporary sediment control measures, such as additional silt fencing, straw rolls, covering stock piles and directing runoff to sediment detention structures to filter and remove sediment.
 - Use temporary measures, such as flow diversion, temporary ditches, and silt fencing or straw wattles.
 - Any stockpiled soil shall be placed, sloped, and covered so that it would not be subject to accelerated erosion.
 - Accidental discharge of all Project related materials and fluids into local waterways shall be avoided by using straw rolls or silt fences, constructing berms or barriers around construction materials, or installing geofabric in disturbed areas with long, steep slopes.
 - After ground-disturbing activities are complete for each Project component constructed, all graded or disturbed areas shall be covered with protective material such as mulch, and reseeded with native plant species. The Erosion Control and Revegetation Plan SWPPP shall include details regarding site preparation, top soiling or composting, seeding, fertilizer, mulching, and temporary irrigation.

- HYDRO-2: Stormwater Pollution Prevention Plan. A Stormwater Pollution Prevention Plan (SWPPP) and a Spill Control and Countermeasures Plan (SCCP) shall be prepared and implemented by the Park District's Construction Contractor following SWRCB standards for erosion control and stormwater management. Specific measures, as cited below, shall be adapted from the most current edition of the Stormwater Best Management Practice Handbook for Construction, published by the California Stormwater Quality Association (CASQA). The SWPPP shall include Best Management Practices (BMPs) to prevent or minimize stormwater pollution during construction activities, as well as addressing post construction stormwater management and permanent erosion control. The Project Erosion Control and Revegetation Plan, and Spill Control and Countermeasures Plan, shall be included as part of the SWPPP. Plan preparation and implementation shall be included in the Project's Construction Documents.
- **HYDRO-3:** Equipment Maintenance. All refueling and/or maintenance of heavy equipment shall take place at a minimum of 50 feet away from the top of bank of creeks and all identified jurisdictional wetlands and Waters of the US drainage courses. The refueling/maintenance and construction staging area shall be bermed, graveled, or covered with straw and incorporate measures for capture of any accidental spills. All temporary construction lay-down and staging areas shall be restored upon completion of work with silt fences, straw rolls, and ground bags, etc. removed.
- **HYDRO-4:** Well. The Park District shall coordinate and consult with the Alameda County Water District and obtain a permit or approval for the following:
 - Closure of abandoned wells and related irrigation and drainage infrastructure.
 - Drilling for piers or wells that may penetrate groundwater aquifers.
 - Provide continued access to existing monitoring wells and continue to cooperate with ACWD in monitoring activities.
- **HYDRO-5:** Unused Septic Tank and Leachfield Systems. The Park District shall obtain a permit or approval from Alameda County Environmental Health for the closure and abandonment of obsolete and unused septic tank and leachfield systems.
- **HYDRO-6: Stormwater Management.** The Park District shall prepare and implement a post construction stormwater management plan in compliance with the City of Fremont's joint municipal stormwater permit and development permit program.
- **HYDRO-7: Bridge Design.** The Park District shall prepare and submit final bridge plans for all new vehicular and pedestrian bridges that cross waterways under jurisdiction by the City of Fremont or Alameda County. The bridge plans are subject to review and approval by the City of Fremont Engineering Department and Alameda County Flood Control and Water Conservation District. The bridge plans shall include structural engineering, geotechnical engineering, and hydraulic engineering information. The responsible designer shall be a State of California licensed Civil Engineer and shall be experienced in hydraulic analysis, bridge design, and flood channel and bank protection design. The Engineering Plans shall demonstrate conformity to City of Fremont, Alameda County, and FEMA floodplain management regulations and include design elevations of the bridge/boardwalk, conformity with 100-year flood elevation freeboard requirements, the locations and structural design of the bridge abutments with respect to flood flows, bridge loading, and channel bank protection requirements.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?				\boxtimes
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			\boxtimes	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

- a) The 306-acre project site is currently undeveloped except for several uninhabited structures. Development of the proposed park expansion would not divide any established community. The proposed project includes pedestrian and bicycle intersection improvements on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road, along with safety improvements to the intersection crossing by the San Francisco Bay Trail. These alterations to Paseo Padre Parkway would not impede or obstruct travel on this street. Therefore, the proposed project would therefore not divide an established community, and there would be *no impact*.
- b) The project site is designated RCP (Open Space Resource Conservation/Public) in the Fremont General Plan. Lands in the Resource Conservation and Public Open Space category "will remain as permanent open space through the horizon year of this plan. A limited number of recreational and regional park improvements, such as trails or interpretive nature centers, may be appropriate. However, the focus in most areas is on the preservation of natural open space and restoration and enhancement of native habitat."²⁸

The project site is in an O-S (Open Space) zoning district, with the purpose "To permit limited but reasonable use of open lands while protecting the public health, safety and welfare from the dangers of seismic hazards and unstable soils; preserve the topography of the city that shapes it and gives it its identity; allow land to be used for agricultural production in its natural or as near natural state as possible; coordinate with and carry out regional, county, and city open space plans..."²⁹

The proposed park expansion project would maintain the site as open space, with limited visitor-serving improvements, which would be consistent with both the General Plan designation and zoning class of the site. This impact would be *less-than-significant*.

c) The project area is not covered by a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be **no impact**.

Mitigation Measures

N/A

²⁸ City of Fremont, *General Plan*, Adopted December 2011, Land Use Element, page 2-29.

²⁹ Southern Alameda County GIS Authority, available online at: http://egis.fremont.gov/apps/public/, accessed 1 May 2018.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			\boxtimes	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			\boxtimes	

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a, b) Regionally significant construction aggregate resources in the City, as designated by the State Mining and Geology Board, include "Sector L", which encompasses the northeast portion of the project site and "Sector M", which extends into a small area of the southern portion of the project site. These sectors are constrained by one or more environmental issues. Although the City has not categorically excluded mineral resource development, it is not expected that extraction of these resources will continue due to the many environmental constraints. In any case, the proposed park expansion project would install limited visitor-serving facilities, such as trails and wildlife observation platforms within the designated mineral areas, while maintaining these areas as open space. This would not substantially affect the availability of the designated mineral resources. The impact on mineral resources would be less than significant.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XII. NOISE : Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			\boxtimes	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		\square		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			\square	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise is the term generally given to the "unwanted" aspects of intrusive sound. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener, including the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the acuity of a listener's hearing, the activity of the listener during exposure: sleeping, working, etc.). Environmental noise has a number of documented undesirable effects on human health and welfare both psychological (e.g., annoyance and speech interference) and physiological (e.g., hearing impairment and sleep disturbance).

Environmental Setting: The *City of Fremont General Plan Safety Element* (Chapter 10 - Noise and Vibration section) identifies motor vehicles, trains, industrial uses and mechanical equipment as the City's most significant noise sources. Other areas of the City are substantially affected by noise from such large transportation and stationary sources, but the Project site (i.e., several land parcels from the former Patterson Ranch, totaling about 300 acres) is currently open space and adjacent to the eastern border of the Coyote Hills Regional Park. State Highway 84 passes about a mile south of the Project site. The Paseo Padre Parkway (identified in the *General Plant Mobility Element* as an important north-south arterial roadway) defines the western limit of urban development in the City of Fremont. Lands to its west are devoted to recreational use and have no substantial local noise sources, although they are exposed to noise from frequent aircraft over-flights. Traffic noise contours presented in the *Safety Element* (Diagram 10-9) show that daily average noise levels on the Project site (except for the portions within a few

hundred feet of Paseo Padre Parkway) are presently at or below 55 dB and are expected to remain so through the year 2030³⁰.

The Project site was visited on Wednesday, September 19, 2018 and several short-term noise measurements were taken at various locations on and near the site. These measurement data are shown in **Table NOI-1** along with observations of the sources contributing to the measured noise levels. The closest existing noise-sensitive receptors to the Project site were identified as the residential areas just east of Paseo Padre Parkway and Ardenwood Boulevard.

Measurement Location	L _{min}	L ₉₀	L _{eq}	L ₁₀	L _{max}	Observations
Location #1 Coyote Hills Visitors Center, north edge of picnic/play area. Begin 12:02	42.5	47.4	59.6	61.5	76.8	Area of Park most exposed to human activity noise; large group of elementary school children at lunch/play before leaving for hike.
Location #2 Quarry Staging Area, near south end of parking lot. Begin 12:43	40.3	41.0	47.3	50.7	56.9	Low activity, only a few cars in parking lot, no picnickers or play near; aircraft fly-overs have dominant noise influence; commercial/small private planes every few minutes, fly-over at high altitude.
Location #3 Project site (Patterson Slough parcel), 350 feet west of Paseo Padre Parkway. Begin 13:29	39.8	41.2	44.6	46.1	54.0	Light traffic on Paseo Padre, cars faintly audible as they pass individually and in groups; occasional aircraft fly-overs, but less frequently than in areas of the Park closer to San Francisco Bay.
Location #4 Ardenwood Blvd, 200 feet north of Commerce Dr., near closest residential. Begin 14:03	45.7	15.7 51.0 68.3 72.8 79.8		79.8	Traffic on Ardenwood Blvd. is dominant noise source; noise peaks in high 60s to mid-70s from cars as they pass; homes along Ardenwood are shielded by an 8-10-foot sound wall.	

 Table NOI-1: On-/Near-Site Daytime Noise Measurement Data and Survey Observations

The unit of measurement for table entries is the **decibel (dB)**, the standard measure of a sound's loudness relative to the human threshold of perception. Decibels are said to be **A-weighted (dBA)** when corrections are made to a sound's frequency components during a measurement to reflect the known, varying sensitivity of the human ear to different frequencies. The **Equivalent Sound Level (L**eq) is a constant sound level that carries the same sound energy as the actual time-varying sound over the measurement period. **Statistical Sound Levels - L**min, L₉₀, L₁₀ and L_{max}- are the minimum sound level, the sound level exceeded 90 percent of the time, the sound level exceeded 10 percent of the time and the maximum sound level, respectively. All entries as recorded during the measurement periods, which for all cases above were 10-15 minutes.

³⁰ City of Fremont, *City of Fremont General Plan, Safety* (Chapter 10), December 2011

Regulatory Setting

The following policies and implementations taken from the *Safety Element* are relevant to assessing the noise impacts of the proposed Project.

Policy 10-8.1 (Site Development Acceptable Noise Environment) with Implementation 10-8.1.A (Noise Standards)

- New development projects shall meet acceptable exterior noise level standards ... the "normally acceptable" noise standards are established in *Land Use Compatibility for Community Exterior Noise Environments* (Table 10-4 of the *Safety Element*). For "Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds" [the Safety Element land use category that seems most applicable to the Project land use], the highest normally acceptable level is an L_{dn}³¹ of 65 dB.
- The goal for maximum [normally] acceptable noise levels in residential areas is an L_{dn} of 60 dB ... [it] will be applied where outdoor use is a major consideration (e.g., backyards in single family developments and recreation areas in multifamily projects).

Policy 10-8.3 (Noise Environment Protection)

Protect existing residential neighborhoods from noise. In general, the City will require the evaluation of mitigation measures for projects under the following circumstances:

- The project would cause the L_{dn} to increase by 5 dB or more but would remain below 60 dB, or;
- The project would cause the L_{dn} to increase by 3 dB or more and exceed 60 dB, or;
- The project has the potential to generate significant adverse community response due to the unusual character of the noise.

Policy 10-8.5 (Construction Noise Levels) with Implementation 10-8.5.B (Construction Noise Mitigation)

 Continue to apply the construction hours ordinance to new development to limit noise exposure created by construction activity. Apply best practices to further limit noise in sensitive areas and long-term projects, such as maintaining construction equipment in good condition and use of mufflers on internal combustion engines, installation of temporary noise barriers, prohibiting extended idling time of internal combustion engines, locating staging areas away from sensitive receptors and other feasible best management practices.

Policy 10-8.10 (Vibration Environment) with **Implementation 10-8.10.A** (New Development to meet FTA [Federal Transit Agency] Guidelines)

The FTA has developed criteria for judging the significance of vibration produced by transportation sources and construction activity, which the City of Fremont has adopted. Under FTA criteria, limiting vibration levels to 94 VdB³² or less would avoid structural damage to wood and masonry buildings (which are typical of residential uses and most other vibration-sensitive receptors), while limiting vibration levels to 80 VdB or less would avoid significant annoyance to the occupants.³³, ³⁴

 $^{^{31}}$ L_{dn} is a 24-hour average noise level where noise occurring after 10 pm and before 6 am has a 10 dB "penalty" added to it before the average is taken. Thus, L_{dn} is always higher than the straight 24-hour L_{eq}.

³² Vibrating objects in contact with the ground radiate energy through the ground, which is measured in vibration decibels (VdB). If such an object is massive enough and/or close enough to an observer, the ground vibrations can be perceptible and, if the vibrations are strong enough, cause damage to existing buildings. Background ground vibration levels in most inhabited areas are usually 50 VdB or lower, well below the threshold of perception (i.e., typically about 65 VdB).

³³ The FTA vibration annoyance threshold is sensitive the number of daily vibration events affecting a receptor. If such events are 30 or fewer, the 80 VdB limit applies, but the limit drops to 72 VdB if the number of events is 70 or more.
³⁴ Federal Transit Agency (FTA), Transit Noise and Vibration Impact Assessment, May 2006.

• The FTA also has criteria for what constitute substantial adverse traffic noise increments, which are more stringent at higher levels of noise exposure (i.e., above 60 dB L_{dn}) than the incremental standards adopted by the City of Fremont, as shown in **Table NOI-2**.

Residential and other buildings where people normally sleep ¹		Institutional land uses with primarily daytime and evening uses ²			
Allowable Noise Existing L _{dn} Increment		Existing Peak Hour L _{eq}	Allowable Noise Increment		
50	5	50	9		
55	3	55	6		
60	2	60	5		
65	1	65	3		
70	1	70	3		

Table NOI-2: FTA Incremental Transportation Source Noise Impact Criteria

Notes:

¹ This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

² This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

Source: Federal Transit Administration, Transit Noise Impact and Vibration Assessment, May 2006.

The City of Fremont's Standard Development Requirements that apply to all development projects include the following requirements for noise, as stipulated in Fremont Municipal Code Section 18.218.010:

(d) Noise.

(1) Construction Noise. To reduce the potential for noise impacts during construction, the following requirements shall be implemented:

(A) Construction equipment shall be well-maintained and used judiciously to be as quiet as practical.

(B) Construction, excavating, grading, and filling activities (including the loading and unloading of materials, truck movements, and warming of equipment motors) shall be limited as provided in Section 18.160.010.

(C) All internal combustion engine-driven equipment shall be equipped with mufflers, which are in good condition and appropriate for the equipment.

(D) The contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.

(E) Loading, staging areas, stationary noise generating equipment, etc., shall be located as far as feasible from sensitive receptors.

(F) The contractor shall comply with Air Resource Board idling prohibitions of unnecessary idling of internal combustion engines.

(G) Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for the project sponsor in the event of noise complaints. The applicant shall designate an on-site complaint and enforcement manager to track and respond to noise complaints. (Ord. 27-2016 § 37, 12-6-16; Ord. 23-2018 § 41, 10-2-18.)

- The proposed project would be required to comply with the following limitations on construction hours, as stipulated in Fremont Municipal Code Section 18.16.010:
- (a) Except as modified herein, construction activity for development projects in any zoning district on any property within 500 feet of one or more residences, lodging facilities, nursing homes or inpatient hospitals shall be limited to the weekday hours of 7:00 a.m. to 7:00 p.m. and the Saturday or holiday hours of 9:00 a.m. to 6:00 p.m., while Sunday construction is not allowed. Construction activity for projects not located within 500 feet of residences, lodging facilities, nursing homes or inpatient hospitals shall be limited to the weekday hours of 6:00 a.m. to 10:00 p.m. and the weekend or holiday hours of 8:00 a.m. to 8:00 p.m. A holiday shall be as defined in Section 2.35.010.
- (b) Resident homeowners and their uncompensated volunteer workers performing construction activity on their own single-family detached home shall be limited to the weekday hours of 7:00 a.m. to 8:00 p.m. and the weekend hours of 8:00 a.m. to 8:00 p.m.
- (c) This section shall not apply to construction necessary to prevent or repair an emergency condition, as reasonably determined by the city manager's designee.
- (d) Projects requiring a permit under the authority of this code shall have construction hours noted on the cover sheet of the construction plans.
- (e) Projects requiring a permit under the authority of this code, except additions and alterations to single-family residential homes or lots, shall have an all-weather notice board conspicuously placed adjacent to the most visible public right-of-way for the duration of construction activity. The placement, format and content of the notice board shall be prescribed by city staff, and shall contain, at a minimum, summary project information, allowable construction hours, and city staff contact information.
- (f) The city manager's designee shall have the authority to modify these hours under any of the following conditions:

(1) To facilitate staff supervision or inspection or when the applicant is required to comply with more restrictive provisions of this code, state or federal law.

(2) When, based upon the nature of nearby uses and/or site-specific considerations, he or she makes a finding that such modified construction hours are reasonably foreseeable to result in an equal or superior level of comfortable enjoyment of life and property by the community.

(3) When the project is located in a right-of-way or easement or on publicly owned property, and such modified hours, on balance, will minimize disruption to the community as a whole, such as to facilitate the orderly flow of traffic or to reduce negative impacts on commercial or residential activity.

(g) Violations of the provisions of this section shall be considered a public nuisance as defined in Section 8.60.040 for purposes of enforcement and remedy. In addition to the provisions of Title 8, staff shall have the power to withhold inspections if construction hours are not observed. (Ord. 36-2005 § 1, 11-22-05. 1990 Code § 8-2205.)

a) According to the noise contour map presented in the *Safety Element* (Diagram 10-9), the daily average noise background levels on most of the Project site (except for portions of the site within a few hundred feet of Paseo Padre Parkway) are at or below 55 dB, substantially below the City's 65 dB *"normally acceptable"* level for *"outdoor sports and recreation, neighborhood parks and playgrounds."* Further, the noise measurements taken during the Project site survey support the conclusion that existing daily average noise background levels over most of the Project site and over most of the existing Coyote Hills Park (except for areas near the Park's Visitors Center and the recreational facilities surrounding it) are substantially lower than 55 dB.³⁵

The Project would not introduce new stationary noise sources to the site, nor would the Project contribute to substantial additional motor vehicle noise along site access roads (more on the estimated permanent Project traffic noise increments in the **Item c** discussion below). After the Project improvement/restoration work is complete, noise levels in the enlarged Coyote Hills Park (except for portions within a few hundred feet of Paseo Padre Parkway) and in the closest residential areas will remain well within City General Plan standards for park and residential uses, respectively, a **less-thansignificant impact**.

- b) The most vibration-intensive piece of construction equipment is a pile driver, but no pile driving will be required for the Project. For the proposed Project improvement/restoration work, the construction equipment will include excavators, loaders, dozers, graders, dump/concrete trucks, etc. in various numbers and combinations during the three-year Project construction period. These types of construction equipment are far less vibration-intensive than pile drivers. They would have to operate directly adjacent to vibration-sensitive buildings for extended periods for there to be a substantial potential for structural damage, or within a few hundred feet for there to be a substantial potential for annoyance to occupants of such buildings. The residences closest to the Project site are 800 feet or more east of the closest parcels where improvement/restoration work would occur. The only fixed vibration-sensitive receptor in the Coyote Hills Park is its Visitors Center, which is located almost a mile west of the closest parcels where improvement/restoration work would occur. Thus, Project construction vibration impacts would be *less than significant*.
- c) Once the proposed Project's access improvements and habitat restoration are complete, it is expected that additional visitors would be attracted to the enlarged Coyote Hills Park. The Project traffic impact report estimates a 25% increase in daily motor vehicle trips (i.e., 70 additional daily trips, from a current daily total of 310 trips to 380 trips post-expansion). Since Paseo Padre Parkway, the site's current major vehicular access road, currently carries more than 11,000 vehicles per day, the Project permanent traffic noise increment at adjacent receptors would amount to a small fraction of a dB,³⁶ an increase far less than the City of Fremont's or the FTA's incremental standards. Thus, Project permanent incremental operational noise impacts would be *less than significant*.
- d) Construction equipment/activity is widely recognized as a major noise source with the potential to cause substantial disturbance when a construction site is located near noise-sensitive receptors (e.g., residential areas, schools, hospitals/nursing homes, public parks, etc.). Implementation of the Project access improvements/habitat restoration to the former Patterson Ranch parcels will require a substantial fleet of construction equipment and supply/concrete delivery trucks operating over an extended period (i.e., Summer 2019 through Summer 2021). All the proposed improvements/habitat area restorations will be

 $^{^{35}}$ Federal Transit Administration (FTA) guidelines (*Transit Noise and Vibration Impact Assessment*, 2006, Appendix D – Determining Existing Noise) for the estimation of 24-hour average noise levels (i.e., L_{dn}) from shorter-term measurements indicate that L_{dn} would be about 2 dB less than the L_{eq} measured during a daytime hour. Daytime hourly noise levels measured on the Project site and Coyote Hills park were in the mid- to upper 40s dB.

³⁶ According to FTA traffic noise methodology, the doubling of a roadway's traffic volume would increase noise levels by 3 dB at adjacent receptors. Since Paseo Padre Parkway carries about 11,000 vehicles per day, an increase of 70 vehicles by the Project would increase adjacent noise levels by about 0.03 dB.

worked on sequentially, not simultaneously, thus limiting the areas of and times that Coyote Hills Park and the closest existing residential area would be exposed to elevated noise levels during Project construction. In addition, all pieces of equipment operating in any particular improvement/restoration area would not have comparable noise impacts at any one receptor - the noise impact of the closest piece of equipment to a receptor is dominant and only a limited number of additional equipment pieces can operate effectively in close proximity to the closest piece.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the noise levels produced by a smaller working-group of construction equipment likely to be used for Project construction (i.e., a dump truck, an excavator and a grader) at various distances from the locus of work, as shown in **Table NOI-3**³⁷.

Average Construction Daytime Noise Level	Maximum Construction Daytime Noise Level
L _{eq} (dBA)	Lmax (dBA)
82	85
76	79
70	73
64	67
58	61
52	55
	Noise Level L _{eq} (dBA) 82 76 70 64 58

Table NOI-3: Modeled Construction Noise Levels

During construction of Project access improvements and habitat restoration, noise levels in areas of the existing Coyote Hills Park close to a locus of construction activity (i.e., within about 200 feet) would rise to levels incompatible with leisure activities. However, since the total area of Coyote Hills Park extends over thousands of feet west and south of the parcels that Project construction would be active on, noise levels in large areas of the Park would remain acceptable for leisure and recreational activities during construction. Considering that the purpose of the Project is improving/expanding Park facilities for public use, temporary voluntary shifts by Park users to areas of the Park less-affected by construction noise could be accommodated without substantial inconvenience until Project construction is complete.

The nearest off-site sensitive receptors to the Project site are the residential areas east of Paseo Padre Parkway and Ardenwood Boulevard, about 800 feet or more west of the closest Project parcel. At this distance, worst-case project average/maximum construction noise levels would be substantially below the existing traffic background noise levels (see noise levels measured at Location #4 in Table NOI-1) that the residences facing these two roadways already experience.

Nevertheless, City General Plan **Policy 10-8.5** would require imposition of measures to reduce project construction noise impacts to the maximum feasible extent, as specified below. Compliance with the City of Fremont's Standard Development Requirement for noise (Fremont Municipal Code Section 18.218.010) and limitations on construction hours (Section 18.160.010), and inclusion of Mitigation Measure NOI-1 will assure that the proposed Project's temporary incremental noise impacts are *less than significant*.

e) Although the Project site is not within any local airport's land use plan or within 2 miles of an existing airport, it is located within 20 miles of all three of the Bay Area's major commercial airports: San Francisco International Airport, Oakland International Airport, and San Jose International Airport. And because of its

³⁷ Federal Highway Administration (FHWA), Roadway Construction Noise Model User's Guide, January 2006.

location close to the San Francisco Bay shore, it is subject to frequent over-flights of aircraft on approach/departure routes that frequently follow the San Francisco Bay shore. But the great majority of such over-flights are at relatively high altitude and the Project site is far outside the 65 dB daily average noise contours (i.e., the common federal metric of noise impact to noise-sensitive receptors) as recently determined around each major Bay Area airport. Thus, aircraft noise impacts on/near the Project site are *less than significant*.

f) The proposed project is not located in the vicinity of a private airstrip. **No impact.**

Mitigation Measures

- **NOI-1**: The following BMPs shall be incorporated into the construction documents to be implemented by the project contractor:
 - Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
 - Use quietest type of construction equipment whenever possible, particularly air compressors.
 - Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
 - Prohibit unnecessary idling of internal combustion engines.
 - Designate a noise (and vibration) disturbance coordinator at the Park District who shall be responsible for responding to complaints about noise (and vibration) during construction. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and determine and implement reasonable measures warranted to correct the problem.
 - Limit noise generating activities to the weekday hours of seven a.m. to seven p.m. and the Saturday or holiday hours of nine a.m. to six p.m., with Sunday noise not allowed per City noise ordinance.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			\boxtimes	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

Comment to Questions

a) The proposed project would not construct new homes or businesses, with the exception of possible reuse of the historic Milk House building as a produce stand or other agriculturally related use. The project's new infrastructure and utilities would be limited to that needed to serve the expanded park's visitor facilities. These components of the proposed project would not result in substantial population growth in the area, either directly or indirectly. The impact on population growth would be *less-than-significant*.

b, c) There are no existing residents or habitable dwelling units on the project site. The Labor Contractors residence on the site, which would be demolished, in not in habitable condition and is currently unoccupied. The project would not displace any existing habitable housing or persons residing in the area, and there would be **no impact**.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			\boxtimes	
Police protection?			\boxtimes	
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				\boxtimes

a) Fire Protection. The Fremont Fire Department (FFD) is responsible for providing the rapid delivery of emergency fire suppression, emergency medical services, technical rescue, hazardous materials response, and fire prevention to the City of Fremont. Service is delivered throughout Fremont from 11 fire stations. Fire Station 10 (5001 Deep Creek Road) is the closest fire station to the project site, located approximately 1.3 mile northeast of the project site. Fire Station 10 is staffed with one Fire Company (three firefighters) and is equipped with a fire engine, a patrol car and a utility vehicle for response to various call types. Fremont Fire Department is the primary provider of fire protection services to Coyote Hills Regional Park and the project area. On occasion, private paramedic companies serving Alameda County arrive first for emergency calls in the Park.

The East Bay Regional Park District Fire Department (EBRPD-FD) is a branch of the Public Safety Division within the East Bay Regional Park District that is comprised of fire and lifeguard services. The fire department provides all typical emergency services including fire suppression, search and rescue, fuels management, and pre-hospital emergency medical care. EBRPD-FD responds to incidents concurrently with other responsible fire agencies. Depending upon the park's location, fire response is shared either with CAL FIRE or with municipal fire departments. EBRPD-FD's response area includes both parklands and areas adjacent to parklands. In remote areas, primary fire suppression responsibility lies with the Alameda County Fire Department or CAL FIRE. The EBRPD-FD provides secondary wildland fire response in support of CAL FIRE.

The Park District maintains a webpage dedicated to fire safety. Fire warning information on the page is updated to reflect changing conditions, weather related safety warnings, and fire related park and trail restrictions (<u>http://www.ebparks.org/fire-warning#fire-safety</u>).

The proposed project would add the project site to Coyote Hills Regional Park, increasing the area of responsibility of the EBRPD Fire Department but not changing the area of responsibility of the Fremont

Fire Department. The project would increase the number of visitors, but would not change the recreational types of activities that occur in the project vicinity. This increase in usage would not result in a substantial increase in demand for service by the EBRPD fire department, which already serves the adjacent Coyote Hills Regional Park. Implementation of the proposed project would not create a need for expanded or new fire facilities in Fremont or the Park District. As discussed in Section VIII.h, above, the Park District's existing program of fire prevention and suppression would be implemented at the proposed project site. The impact on fire protection services would be *less-than-significant*.

Police Protection. The Fremont Police Department (FPD) provides police services in the city of Fremont. FPD is located at 2000 Stevenson Boulevard in central Fremont, approximately five miles east of the project site. All of the Department's business is conducted, and police services are dispatched, from this location. The FPD does not have any sub-stations, and no new stations are planned at this time. FPD provides patrol coverage of Fremont in three patrol zones (Zone 1, Zone 2, and Zone 3). The proposed project is located at the northwest corner of Zone 2, which covers portions of central and northern Fremont. According to interviews conducted with the Department for the Patterson Ranch Planned District EIR (2010), Zone 2 is patrolled three to four officers at any given time.

East Bay Regional Park District Police Services (EBRPD-PD) maintains a staff of full time professional police officers who are based out of Lake Chabot Regional Park in Castro Valley along with substations operated in Orinda and Antioch. At peak season during the summer, EBRPD Public Safety Division is staffed by approximately 500 personnel, including 65 sworn police officers. The department includes an Air Support Unit, Marine Patrol Unit, Equestrian Patrols, K-9 Unit, Special Enforcement Unit, Investigations Unit, and a 24-hour per day 911 Communications Center.

U.S. Fish and Wildlife agents are stationed at Don Edwards National Wildlife Refuge adjacent to and south of Coyote Hills Regional Park. Fish and Wildlife Agents perform routine patrols of the area and are occasionally in the Park, which results in the benefit of an increased law enforcement presence.

An additional measure of patrol and outreach in the park system is provided by the Park District's Volunteer Trail Safety Patrol. The Volunteer Trail Safety Patrol is comprised of five patrol groups: the Volunteer Mounted Patrol, the Volunteer Bicycle Patrol, the Volunteer Hiking Patrol, the Companion Dog Patrol, and the Volunteer Marine Safety Unit. Volunteer Trail Safety Patrol members are dedicated to preserving the safety of the public and of the East Bay Regional Park District's natural and historical resources. Patrol members observe and report safety issues, incidents, and emergencies; they educate visitors about East Bay Regional Park District resources, programs, facilities, and rules; and perform outreach to foster positive relationships among varied trail user groups.

The Fremont Police Department currently patrols the project site, as well as providing immediate response to emergencies within the existing Coyote Hills Regional Park. The proposed project would add the project site to Coyote Hills Regional Park, which is under the concurrent jurisdiction of the EBRPD and the Fremont Police Departments. This would increase the area of responsibility of the EBRPD Police Department but not change the area of responsibility of the Fremont Police Department. The project would not change the number of visitors, but would not change the recreational types of activities in the area. This increase in usage would not result in a substantial increase in demand for service by the EBRPD Police Department, which already serves the adjacent Coyote Hills Regional Park. Implementation of the proposed project would not create a need for expanded or new police facilities in Fremont or the Park District. The impact on police protection services would be *less-than-significant*.

Schools. The park expansion project would not construct any housing or generate additional population. There would be no effect on the student population or schools. There would be *no impact* on schools.

Parks. The project consists of an expansion of the existing Coyote Hills Regional Park. It would not increase local or regional population, or require new or physically altered park facilities to maintain acceptable service ratios. There would be *no impact* on parks.

Other Public Facilities. The proposed project would not require other new or physically altered public facilities, such as libraries, to maintain acceptable service ratios. There would be *no impact* on other public facilities.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			\boxtimes	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	\boxtimes			

Comment to Questions

- a) As discussed in Section XIV, above, the proposed project consists of an expansion of the existing Coyote Hills Regional Park. Because it would provide additional park facilities without increasing local or regional population, it is not anticipated to increase use of existing neighborhood or regional parks such that substantial physical deterioration of the facility would occur or be accelerated. This impact would be **less***than-significant*.
- b) The project consists of an expansion of the existing Coyote Hills Regional Park, the environmental impacts of which are evaluated in this Initial Study. As discussed in Sections I through XIX, implementation of mitigation measures identified in this Initial Study would reduce some project impacts to a less-than-significant level, but impacts on Cultural Resources and Transportation would be *potentially significant*. These impacts will be evaluated in the EIR.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	\boxtimes			
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	\boxtimes			
e) Result in inadequate emergency access?	\boxtimes			
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	\boxtimes			

a) through g) The proposed project would have a *potentially significant* impact on the local circulation system, transportation safety and hazards, emergency access and plans and policies regarding alternative transportation. These impacts, and required mitigation measures, will be evaluated in the EIR.

Mitigation Measures

Mitigation measures, if necessary, will be identified in the EIR.

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		Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
	XVII. TRIBAL CULTURAL RESOURCES : Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	\boxtimes			
	b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

- a) The project site contains a prehistoric archaeological site (CA-ALA-13, or P-01-000034) that could be affected by the project. This is a **potentially significant** impact on tribal cultural resources, and will be evaluated in the EIR.
- b) The proposed project would involve ground disturbance including grading and trenching on a site with known archaeological resources, including potential human remains. This is a *potentially significant* impact on tribal cultural resources, and will be evaluated in the EIR.

Mitigation Measures

Mitigation measures, if necessary, will be identified in the EIR.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			\boxtimes	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			\boxtimes	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			\boxtimes	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			\boxtimes	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?		\boxtimes		
g) Comply with federal, state, and local statutes and regulations related to solid waste?		\boxtimes		

- a) Wastewater collection and treatment services to the project site are provided by the Union Sanitary District (USD), an independent wastewater district with a 60.2 square mile service area that includes the cities of Fremont, Newark, and Union City, and serves a population of 350,538 persons.³⁸ USD currently treats approximately 25 million gallons per day (mgd) of wastewater, and has the capacity to treat 33 million gallons per day, at the Alvarado Treatment Plant in Union City, approximately 2.5 miles northwest of the project area. The proposed project would generate a small incremental increase of wastewater at the new restroom on the project site. This wastewater would consist of normal domestic wastewater, which would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board. There would be *no impact*.
- b) Fremont is served by the Alameda County Water District (ACWD). According to adopted Urban Water Management Plan (UWMP) for the 2015-2020 period, water use in recent years the ACWD's service area has been declining due to District-sponsored demand management efforts and voluntary conservation efforts by customers.³⁹ Total water use in the Water District was 53,800 acre-feet in fiscal year 2014-2015.

³⁸ Union Sanitary District website, available online at: https://www.unionsanitary.com/about-us/about-us/mission-facts-history, accessed 1 May 2018.

³⁹ Alameda County Water District, Urban Water Management Plan 2015-2020, available online at: http://www.acwd.org/index.aspx?nid=365, accessed 1 May 2018.

The proposed project would install water lines to provide potable water to the new restroom and the existing Milk House building; reconstruct the existing sewer main along Patterson Ranch Road that serves the existing Visitor Center in Coyote Hills Regional Park west of the expansion project site; and install a parallel sewer line to service the new restroom on the project site. Both the potable water demand and the wastewater generation of the project's new visitor facilities would be small relative to existing water and wastewater treatment demand, respectively, and would not require the construction of new water or wastewater treatment facilities or expansion of existing facilities during normal, dry, or multiple dry years. This impact would be *less-than-significant*.

- c) The project would maintain existing undeveloped, permeable surfaces on most of the 306-acre project site. The project would create new impervious surfaces including a 100-car paved parking lot, restroom, entry kiosk, and 3.5 miles of ten- to 12-foot-wide paved trails. Construction of these facilities would create approximately five acres of new impervious surfaces, which would be distributed throughout the project area, and surrounded by pervious surfaces including wetlands. This would not result in a substantial alteration of stormwater flows, or interference with groundwater recharge, on the project site. No new or expanded stormwater drainage facilities would be required. This impact would be *less-than-significant*.
- d) As discussed in Section XVII.b, above, the potable water demand of the project's new visitor facilities would be small relative to existing water demand, and could be served by existing entitlements and resources. No new or expanded entitlements would be needed. This impact would be *less-thansignificant*.
- e) As discussed in Sections XVII.ba and XVII.b, above, the wastewater generation of the project's new visitor facilities would be small relative to existing wastewater treatment capacity, and could be served by available capacity at the existing Alvarado Treatment Plant. This impact would be *less-than-significant*.
- f, g) Allied Waste Services, Fremont's franchise service hauler, provides recycling and organic collection services to residents and businesses in Fremont. Fremont's solid waste disposal requirements include recycling or special materials disposal programs to comply with the provisions of AB 939 (which mandate a minimum 50 percent diversion of material from landfills by 2000) and the Alameda County Waste Reduction and Recycling Act of 1990 (Measure D, which adopted a policy goal to further reduce the total tonnage of materials at landfills generated in Alameda County by 75 percent by 2010).

Construction of the proposed project would generate construction and demolition waste, which could affect Fremont's ability to meet the requirements of AB 939 and Alameda County related to the reduction of solid waste disposal, a *potentially significant* impact on landfill capacity. Implementation of the following Mitigation Measure UTIL-1 would reduce this impact to a *less-than-significant* level.

Operation of the proposed recreational project would result in a small increase in the amount of solid waste generated at the site. It would not generate unique types of solid waste that would conflict with existing regulations applicable to solid waste disposal, or create the need for any special solid waste disposal handling. The non-recyclable waste generated by operation of the project would be small and would not have a substantial effect on permitted capacity on the landfills serving the project site. The project would comply with all statutes and regulations related to solid waste. The impact of project operation would be *less-than-significant*.

Mitigation Measures

UTIL-1: Construction and Demolition Debris. Prior to completion of the plans and specifications, the Park District shall review the plans to ensure that they include a solid waste recovery plan. This recovery plan shall be in compliance with the Park District's adopted sustainability policy, which is directed at

minimizing disposal of solid waste generated during construction in accordance with applicable state and county codes. The recovery plan shall address, at a minimum, recycling of asphalt and concrete paving materials, lumber and metal and concrete pipes and tanks, and balancing graded soil on site to the maximum extent feasible.

	Potentially Significant Impact	Less-than- significant with Mitigation	Less-than- significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		\square		

- a) The proposed project could contribute to potentially significant cumulative impacts on biological resources. These impacts will be evaluated in the EIR.
- b) The proposed project would contribute incrementally to cumulative air pollutant emissions, traffic, and noise. Project-related air quality emissions would be below the BAAQMD significance thresholds for construction emissions, with implementation of Mitigation Measure AIR-1, and the project would not make cumulatively considerable contributions to the Bay Area's regional problems with ozone or particulate matter. Thus, by complying with the regional air quality plan, cumulative air quality emission impacts of the project would be less-than-significant.

As a recreational park use within an urbanized area, operation of the project would have a less-thansignificant impact on increases in ambient noise levels in the project vicinity. Implementation of Mitigation Measure NOI-1 would reduce temporary construction noise impacts to a less-than-significant level. The project is not expected to cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street and highway system. Therefore, project-related vehicle trips would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The project would not result in cumulatively considerable noise impacts and, therefore, no significant cumulative noise impacts are expected.

The proposed project could contribute to **potentially significant** cumulative impacts on biological resources, cultural resources, and transportation. These cumulative impacts will be evaluated in the EIR.

c) As discussed in Section VIII. Hazards and Hazardous Materials, the project would follow all laws and regulations involving the use and transport of hazardous materials and would not cause potential health risks to the public. Mitigation measures have been included to reduce the impacts of Hazards and Hazardous Materials to a *less-than-significant* level.

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Appendix B Notice of Preparation (NOP) and Comments on NOP



2950 PERALTA OAKS COURT P.O. BOX 5381 OAKLAND CALIFORNIA 94605-0381 T: 1-888-EBPARKS F: 510-569-4319 TRS RELAY: 711 WWW.EBPARKS.ORG

NOTICE OF PREPARATION (NOP) AND SCOPING SESSION FOR AN ENVIRONMENTAL IMPACT REPORT FOR:

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

MAY 14, 2018

The East Bay Regional Park District will be the Lead Agency and will prepare an Environmental Impact Report (EIR), pursuant to the California Environmental Quality Act (CEQA), for the proposed Coyote Hills Restoration and Public Access Project. The project site is located in Fremont, Alameda County, along the western frontage of Paseo Padre Parkway, approximately between Ardenwood Blvd. and Dumbarton Circle. The project will amend the park land use plan to expand the park boundary eastward towards Paseo Padre Parkway, restore habitat and develop visitor serving facilities such as trails, parking and restrooms. The project site consists of the approximately 306-acre parcel west of Paseo Padre Boulevard, and immediately adjoining Coyote Hills Regional Park, on its east side, in Fremont CA. An abbreviated Project Description is attached along with a Location Map. The anticipated scope of the EIR is described below.

The EIR will focus on evaluating the topic of Cultural Resources and may also evaluate Transportation/Traffic. All other topical issues will be evaluated in an Initial Study, including: Aesthetics, Agricultural and Forestry Resources, Air Quality and Greenhouse Gas Emissions, Biological Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, Tribal Cultural Resources, and Utilities and Service Systems. The EIR will evaluate project and cumulative impacts, growth inducement, shortterm versus long-term impacts, effects on human beings, and alternatives to the project.

The East Bay Regional Park District invites you to comment on the proposed scope of the EIR. **Please send** your written comments within 30 days from the date you receive this notice, but no later than June 18th, 2018, to: Karla Cuero, East Bay Regional Park District, 2950 Peralta Oaks Court, Oakland, CA 94605, or via email: <u>kcuero@ebparks.org</u>. You may also contact Karla by telephone at (510) 544-2622.

You may also provide comments at the EIR Scoping Session, which will be held on Thursday, May 31, 2018 at 6:30PM, at the East Bay Regional Park District's Board Room at 2950 Peralta Oaks Ct. Oakland CA, 94605.

The East Bay Regional Park District is the Lead Agency (i.e., the public agency with the greatest responsibility for either approving the project or carrying it out) for the project. This notice is being sent to the State Clearinghouse, other identified responsible agencies, and other interested parties. Other presently known responsible agencies may include: The City of Fremont, Alameda County Public Works Agency, The Alameda County Flood Control and Water Conservation District and The California Department of Fish and Wildlife. When the Draft EIR is published, it will be sent to the State Clearinghouse and to others who respond to this Notice of Preparation (NOP) or who otherwise indicate that they would like to receive a copy, which will be available on the East Bay Parks website, <u>http://www.ebparks.org</u>. A Final EIR with responses to comments on the Draft EIR will be prepared prior to final consideration of the proposed projects. Notices of public

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hearings on the project, and the availability of the Final EIR, will also be provided to NOP respondents, those requesting such notice, and available through the District's website at http://www.ebparks.org/about/planning/default.htm#patterson.

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Karla Cuero, Environmental Programs Project Coordinator East Bay Regional Park District

Dennis Waespi President Ward 3

Ayn Wieskamp Vice-President Ward 5

Ellen Corbett Dee Rosario Secretary Ward 2

Treasurer

Ward 4

Board of Directors

Whitney Dotson Ward I

Beverly Lane Ward 6

Colin Coffey Ward 7

Coyote Hills Restoration and Public Access Project

Abbreviated Project Description

The Project consists of two main actions: 1) approve a Land Use Plan Amendment to include the 306 acre Park Expansion Area to the park; 2) implement habitat restoration and public access improvements to provide visitor facilities (parking, trails, restrooms).

Land Use Plan Amendment

Three Land Use Units are proposed at five locations within the project area. These units include Natural Units, Recreational Units and a new Agricultural Unit. The five locations within the park expansion area include:

- Patterson Slough Natural Unit
- Western Wetlands Natural Unit
- Southern Wetlands Natural Unit
- Historic Patterson Ranch Farm and Farm Yard Agricultural Unit
- Ranch Road Recreation Unit

Habitat Restoration and Public Access Improvements

The proposed plan consist of five elements: 1) Habitat Restoration, Enhancement, and Wildlife Management Activities, 2) Cultural Resources Management Actions, 3) Recreation and Visitor Serving Facilities Construction, 4) Public Access Trails Construction, and 5) Agricultural Land Use and Associated Activities.

1. Habitat Restoration and Enhancement and Wildlife Management Activities

The Patterson Slough area, north of Patterson Ranch Road, would be developed and managed for habitat protection, restoration, enhancement, and wildlife management. Restoration and enhancement in this area includes mixed riparian forest, willow sausal restoration, perennial and seasonal wetlands enhancement, and oak savanna and native grasslands establishment.

Wetlands enhancement would occur within the low lying Western Wetlands area on the west side of the hstoric Patterson Ranch farm fields. This part of the Project Area contains depressional wetlands that pond water during the winter rainy period, as well as adjacent areas that are saline and sodic (salt and sodium affected).

The previously farmed Southern Wetlands, located from just north of Ardenwood Creek to the southern property boundary, would be restored in cooperation with the Alameda County Flood Control and Water Conservation District as a mix of riparian, freshwater and seasonal wetlands, as well as saline-alkaline wetlands.

2. Cultural Resources Management Actions

Important and known locations of native Californians (Ohlone people) cultural resources occur within the Project Area, and there may be other, presently unknown resources throughout this area. Construction of site facilities would be designed to minimize excavation. There are two historic structures within the Project

Area that will be evaluated in the Environmental Document: 1) the Farm Labor Contractor's residence located immediately adjacent to the lower portion of Patterson Slough, and 2) the Milk House building in the Patterson Ranch Farm Yard area, south of the intersection of Patterson Ranch Road and Paseo Padre Parkway.

3. Recreation and Visitor Serving Facilities Construction

Visitor serving facilities include an approximately 100 car parking lot and open-use area, a new restroom, potable water, picnic area, interpretive elements, and a new entry kiosk. A park entry sign, landscape plantings, and fencing would be installed at the improved Park entry. Pedestrian and bicycle intersection improvements may be provided on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road, in coordination with the City of Fremont.

4. Public Access Trails Construction

Approximately four miles of trails are proposed for the Project Area with a continuous north-south shared use trail that traverses the entire area. The trail system includes connections to the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, a new connection to the existing Crandall Creek Trail, improving the Tuibun Trail to the Visitor Center, and providing a link to the future Lake Unit and camping opportunities at the former Dumbarton Quarry.

5. Agricultural Land Uses and Associated Activities

The historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway would continue to be used for agriculture. The Patterson Ranch Milk House building in the Farm Yard area may be rehabilitated for use as a fresh produce stand or other compatible park serving use.





STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH



KEN ALEX

DIRECTOR

EDMUND G. BROWN JR. GOVERNOR

Notice of Preparation



June 5, 2018

To: Reviewing Agencies

Re: Coyote Hills Restoration and Public Access Project SCH# 2018062002

Attached for your review and comment is the Notice of Preparation (NOP) for the Coyote Hills Restoration and Public Access Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Karla Cuero East Bay Regional Parks District 2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely.

Scott Morgan Director, State Clearinghouse

Attachments cc: Lead Agency

> 1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 1-916-322-2318 FAX 1-916-558-3184 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	2018062002 Coyote Hills Restoration and Public Access Project East Bay Regional Parks District						
Туре	NOP Notice of Preparation						
Description	The project consists of two main actions: 10 approve a Land Use Plan Amendment to include the 306 acre Park Expansion Area to the park; 2) implement habitat restoration and public acess improvements to provide visitor facilities (parking, trails, restrooms)						
Lead Agenc	y Contact		n Br	· · · · · · · · · · · · · · · · · · ·			
Name	Karla Cuero						
Agency	East Bay Regional Parks District						
Phone	(510) 544-2622	F	ax				
email							
Address	2950 Peralta Oaks Court						
	P.O. Box 5381						
City	Oakland	State CA	Zip 94605				
Project Loca	ation	. 2					
County	Alameda		14				
City	Fremont			2月			
Region	riemoni						
Cross Streets	Pasen Padre Parkway and Patters	on Ranch Road					
Lat/Long	Paseo Padre Parkway and Patterson Ranch Road 37° 33' 14.42" N / 122° 04' 15.50" W						
Parcel No.	543 0439 00302, 543 0439 03100,						
Township	Range	Section	Base				
			20 20				
Proximity to							
Highways	84 and Interstate 880						
Airports							
Railways							
Waterways	Alameda Creek						
Schools							
Land Use	Open Space - Resource Conserva	ation/Public					
Project Issues	Archaeologic-Historic; Traffic/Circulation						
Reviewing	Resources Agency; Cal Fire; Offic	e of Historic Preservation;	Department of Parks and F	Recreation;			
Agencies	Department of Water Resources;		•				
	Commission; Delta Stewardship Council; Native American Heritage Commission; State Lands Commission; California Highway Patrol; Caltrans, District 4; Air Resources Board, Transportation						
							Projects; State Water Resources Control Board, Division of Drinking Water, District 4; Regional Water
	Quality Control Board, Region 2						
		2	·				
Date Received	06/05/2018 Start of Review	06/05/2018 End	of Review 07/05/2018				

Print Form

SCH 2018062

Appendix C

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Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

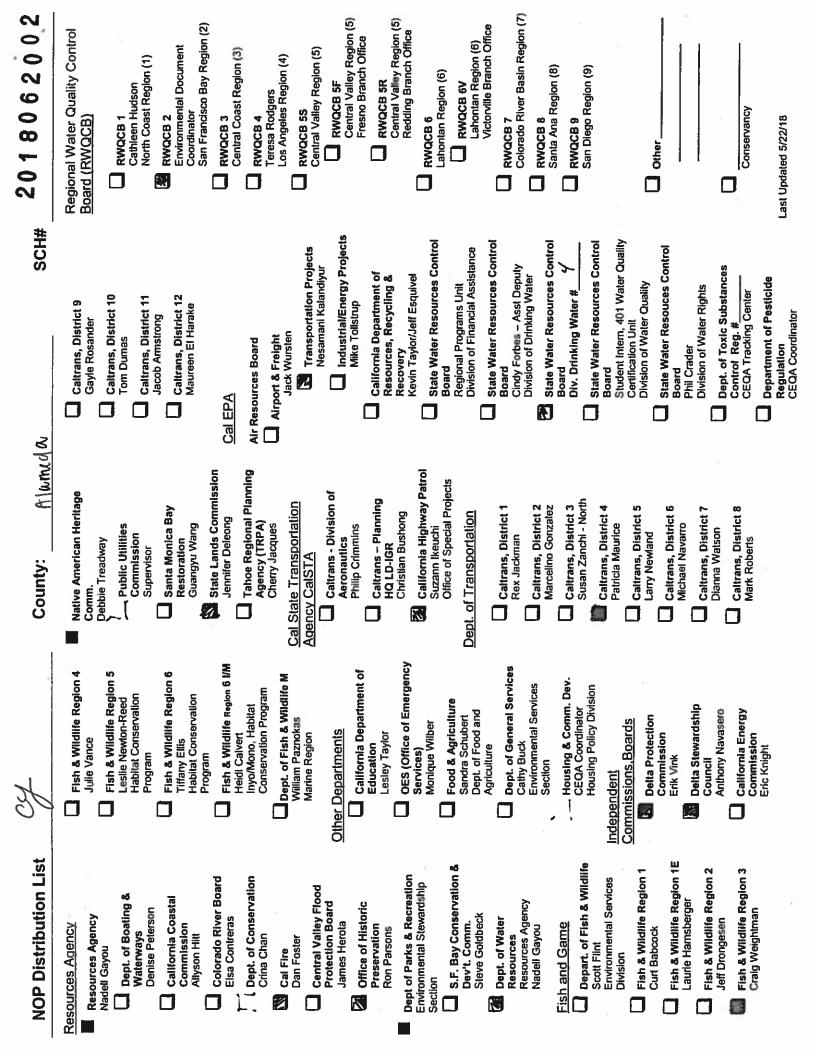
Project Title: Coyote Hills Rest	oration and Public Access P	roject		
Lead Agency: East Bay Regional	Park District		Contact Person: Karl	a Cuero
Mailing Address: 2950 Peralta Oa	aks Court		Phone: (510)544-26	522
City: Oakland	2	Zip: 94605	County: Alameda	
Project Location: County: Alame		City/Nearest Comr	nunity: Fremont	
Cross Streets: Paseo Padre Parky				Zip Code: 94555
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Early Cons	Supplement/Subsequent EIR		EA	Final Document
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Local Action Type:	*			
General Plan Update	Specific Plan	Rezone	JUN 05 2018	Annexation
General Plan Amendment	Master Plan			
General Plan Element	Planned Unit Development	Use Penhit	IE ULEARING	OUSEdevelopment Coastal Permit
	Site Plan) X Other: Land use plan
				Amendment
Development Type:				
Residential: Units A	cres	_		
Office: Sq.ft.	Cres Employees	Transport	ation: Type	
Commercial:Sq.ft. A	Employees	Mining:	Mineral	MW
Industrial: Sq.ft. A	teres Employees		I ype	MW
X Recreational: (restoration/recr	eation/public access)		s Waste Type	MGD
Water Facilities: Type		Other:	5 Willice 1 Jpc	
Project Issues Discussed in Do	ocument:			
Aesthetic/Visual] Fiscal	Recreation/Par	ks	Vegetation
Agricultural Land	Flood Plain/Flooding	Schools/Unive	rsities	Water Quality
	Forest Land/Fire Hazard	Septic System		Water Supply/Groundwater
	Geologic/Seismic	Sewer Capacit	•	U Wetland/Riparian
Biological Resources	Minerals		compaction/Grading	Growth Inducement
Coastal Zone	Noise	Solid Waste		Land Use
Economic/Jobs	Population/Housing Balance Public Services/Facilities	 Toxic/Hazardo Traffic/Circula 		Cumulative Effects
	Traone bervices/racinnes		110/1	Other:
Present Land Use/Zoning/Gene	eral Plan Designation:			
Open Space - Resource Conserv	-			
Project Description: (please u				

Please see attached sheet.

Reviewing Agencies Checklist

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Air Resources Board	Office of Historic Preservation			
Boating & Waterways, Department of	Office of Public School Construction			
California Emergency Management Agency	Parks & Recreation, Department of			
California Highway Patrol	Pesticide Regulation, Department of			
Caltrans District #	Public Utilities Commission			
Caltrans Division of Aeronautics	Regional WQCB #			
Caltrans Division of Aeronautics	Resources Agency			
Central Valley Flood Protection Board	Resources Recycling and Recovery, Department of			
Coachella Valley Mtns. Conservancy	S.F. Bay Conservation & Development Comm.			
Coastal Commission	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy			
Colorado River Board	San Joaquin River Conservancy			
Conservation, Department of	Santa Monica Mtns. Conservancy			
Corrections, Department of	State Lands Commission			
Delta Protection Commission	SWRCB: Clean Water Grants SWRCB: Water Quality			
Education, Department of				
Energy Commission	SWRCB: Water Rights			
Fish & Game Region #	Tahoe Regional Planning Agency			
Food & Agriculture, Department of	Toxic Substances Control, Department of			
Forestry and Fire Protection, Department of	Water Resources, Department of			
General Services, Department of				
Health Services, Department of	x Other: State Coastal Conservancy			
Housing & Community Development	x Other: FWS (Don Edwards)			
Native American Heritage Commission	* other: CA Dept of Fish + wildlife x other: county Agencies			
al Public Review Period (to be filled in by lead age	ency)			
ting Date May 14, 2018	Ending Date June 18, 2018			
d Agency (Complete If applicable):				
sulting Firm:				
iress:	Address:			
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tact:	Phone:			
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March 19, 2018

Wilton Rancheria Antonio Ruiz, Jr., Cultural Resources Officer 9728 Kent Street Elk Grove, CA 95624

RE: Request for Information - East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Antonio,

I understand that Wilton Rancheria has requested to be notified of all East Bay Regional Park District (EBRPD) projects.

The EBRPD is planning to undertake a habitat restoration and public access project within part of the former Patterson Ranch Property at Coyote Hills Regional Park, Fremont, Alameda County. The historic Patterson Ranch once covered nearly 6,000 acres of farmland along the East Bay shoreline in what is today portions of the cities of Fremont, Union City and Newark. Most of the former ranch has been developed over the past 80 years. The descendants of the Patterson family donated a 296-acre parcel to EBRPD which has increased the area of the regional park by almost one-third. This property, along with a 10-acre parcel purchased in 2016, comprise the 306-acre project area (please see attached map for the project location).

The project area borders much of the eastern boundary of Coyote Hills, extending eastward to Paseo Padre Parkway including approximately 5,000 linear feet of road frontage. Coyote Hills Slough borders the property to the west which is owned and managed by the Alameda County Flood Control District and leased to the EBRPD. The Alameda Creek Regional Trail borders the property to the north just beyond Crandall Creek. The property is bisected by Patterson Ranch Road, with the entry kiosk into Coyote Hills located 0.5 miles west of Paseo Padre Parkway.

The purpose of the proposed project is to restore and enhance ecological habitats and develop public access on the Patterson property at Coyote Hills. Habitat restoration and enhancement will focus on developing self-sustaining ecological habitats with a minimal amount of long-term human intervention. Public access will focus on developing passive recreational facilities that are compatible with restored habitats and that require a minimum level of maintenance. In addition, the Patterson property provides an opportunity to move the park entrance closer to Paseo Padre Parkway to develop a more prominent entry point into one of the District's most heavily visited parks.

Project planning and development has begun and implementation is scheduled to occur in phases. Phase I (2019-2020) will potentially include habitat restoration, construction of a new staging area/parking lot with flush restrooms, relocated entry kiosk, picnic areas, and trails. Subsequent phases are expected to focus on additional restored habitat areas and public access trails and may proceed after completion of the first phase. Further information can be found at: www.ebparks.org/about/planning#patterson.

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Beverly Lane Ward 6 Colin Coffey Ward 7 Robert E Doyle General Manager



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Any information provided will be used to determine if significant archaeological resources may be affected by the proposed project under the California Environmental Quality Act (CEQA).

If I can provide any further information, please don't hesitate to contact me at (510) 544-2622 or <u>kcuero@ebparks.org</u>. Thank you for your timely review of our request.

Sincerely,

Queo.

Karla Cuero Project Coordinator

cc: Chris Barton, Rachel Sater

Dennis Waespi President Ward 3 Ayn Wieskamp Vice-President Ward 5

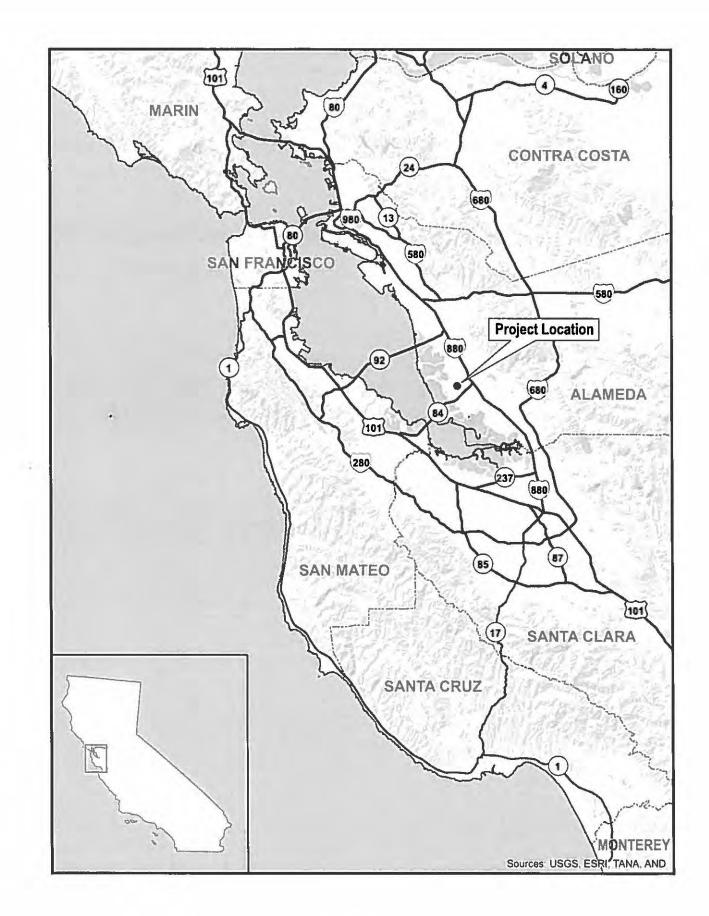
p Ellen Corbett tt Treasurer Ward 4 Dee Rosario Secretary Ward 2 Whitney Dotson Ward I

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tson Beverly Vard 6

Beverly Lane Ward 6

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March 26, 2018

Mr. Andrew Galvan The Ohlone Indian Tribe P.O. Box 3152 Fremont, CA 94539

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Andy,

Thank you for your interest in the Coyote Hills Restoration and Public Access Project, and for your participation in the community workshop on August 14, 2017. As part of the next phase of the project, the District will be analyzing the environmental effects of proposed park improvements under the California Environmental Quality Act.

Julie Bondurant, Principal Planner in the Planning Department here at the District, updated me about your meeting with her on March 19, 2018. I understand that you would like to initiate consultation with the District regarding this project.

Please let me know if any of the dates and times below will work for you to meet at our office @ 2950 Peralta Oaks Court, Oakland.

- 1) Monday, April 16th 1:30-2:30 PM
- 2) Tuesday, April 24th 1:30-2:30 PM
- 3) Thursday, April 26th 1:00-2:00 PM

If I can provide any further information, please don't hesitate to contact me at (510) 544-2622 or kcuero@ebparks.org. Thank you for your timely review of our request.

Sincerely,

la Quel

Karla Cuero Project Coordinator

cc: Julie Bondurant, Chris Barton, Rachel Sater

Dennis Waespi President Ward 3 Ayn Wieskamp Vice-President Ward 5

Ellen Corbett Treasurer Ward 4 Dee Rosario Secretary Ward 2

Board of Directors

Ward 1

n Beverly Lane Ward 6

Lane

MUWEKMA OHLONE INDIAN TRIBE OF THE SAN FRANCISCO BAY AREA REGION

'Innu Huššištak Makiš Mak-Muwekma "The Road To The Future For Our People"

May 17, 2018

TRIBAL CHAIRPERSON ROSEMARY CAMBRA

<u>TRIBAL VICE CHAIRPERSON</u> MONICA V. ARELLANO

TRIBAL COUNCIL HENRY ALVAREZ JOANN BROSE GLORIA E. GOMEZ ROBERT MARTINEZ, JR. RICHARD MASSIATT SHEILA SCHMIDT CAROL SULLIVAN KARL THOMPSON (TRES) FAYE THOMPSON-FREI

TRIBAL ADMINISTRATOR NORMA E. SANCHEZ Karla Cuero Project Coordinator, Environmental Programs East Bay Regional Park District 2950 Peralta Oaks Court, Oakland, CA. 94605

Dear Karla,

Thank you for notifying the Muwekma Ohlone Tribal leadership about the proposed Coyote Hills Restoration and Public Access Project on East Bay Regional Park District Lands adjacent to Coyote Hills in Alameda County.

As you may already know that this park area cross-cuts and falls within the ethnohistoric boundary of the interior East Bay which includes aboriginal Ohlonespeaking tribal groups along the Fremont Plain and adjacent areas whose people were missionized into Missions Dolores, Santa Clara and San Jose and therefore, have historic and biological ties to the Muwekma Tribe's history and genealogical heritage. These groups include the Alson Seunen, Yrgin/Jalquin, Saclan, Chupcan and /Napian/Carquin, from which the enrolled Muwekma members are descended from as independently verified by the BIA Office of Federal Acknowledgement in 2002 as part of our petitioning efforts to regain the Tribe's previous acknowledge status. Furthermore, as the only documented previously Federally Recognized Ohlone tribe (positive determination issued by the BIA on May 24, 1996) of the three historic Costanoan tribal communities (Muwekma Ohlone Tribe from Missions San Jose, Santa Clara and Dolores; Amah Mutsun Tribal Band from Mission San Juan Bautista; and Esselen Nation from Mission San Carlos/Carmel), we, along with our over 550 BIA documented tribal members claim this region as part of our ancestral homeland.

Based upon the above, supported by the attached ethnohistoric and **legal** background information about our tribe, we make the following cultural resources management recommendations in dealing with our aboriginal territory and ancestral heritage sites:

- 1. We support the good efforts by East Bay Regional Park District to conduct this scoping hearing and notice of preparation for an EIR on the 306 acres relative to the proposed Coyote Hills Restoration and Public Access Project.
- 2. The tribe expects that the Cultural Resources Management firm that is hired has a history of conducting exceptional evaluations and predictive models, rather than being selected as "one of-the-good-old boys" that have over these decades produced

relatively meaningless information relative our Tribe's ancestral heritage sites. We further expect that there will be some potential impacts to both recorded and/or unanticipated to our Tribe's ancestral heritage sites.

- 3. If any of our ancestral remains are indeed encountered and there are mitigation plans relative to burial recovery, our tribal leadership intends to be fully involved as steward of our ancestral heritage sites.
- 4. The Muwekma Tribe desires to be kept fully informed on such projects and their outcomes on East Bay Regional Park District Park lands.
- 5. The Tribal leadership supports any educational related programs relative to our ancestral heritage sites and encourages the development of comprehensive interpretive educational program information about each site and the region for the benefit of the general public and Native people.

Our Tribe would like to eventually explore the development of an educational interpretive program with EBRPD relative to these ancestral heritage sites specifically that also includes information about the larger geographic region surrounding the ethnohistoric territory of the Alson and TuibunOhlone-speaking Tribal groups who were engaged in a circum San Francisco Bay/Delta region ceremonial and economic interaction sphere during pre-contact and post contact periods of time.

SOME HISTORIC BACKGROUND ON THE MUWEKMA OHLONE TRIBE AND ITS RELATIONSHIP TO THE REGION SURROUNDING THE LIVERMORE VALLEY, THE LUECHA OHLONE TRIBAL TERRITORY AND THE GREATER EAST BAY

The Muwekma Ohlone Tribe is comprised of all of the surviving lineages who are aboriginal to the San Francisco Bay region and whom were missionized into Missions Dolores, Santa Clara and San Jose. The Muwekma Tribe became Federally Recognized through the Congressional Homeless California Indian Appropriation Acts of 1906 and 1908 and later years, and the Tribe was identified as the Verona Band of Alameda County by the Indian Service Bureau and later was under the jurisdiction of the Reno, and Sacramento Agencies between 1906 to 1927. Muwekma families enrolled with the BIA under the 1928 California Indian Jurisdictional Act and all of the applications were approved by the Secretary of Interior. Muwekma families later enrolled with the BIA during the 1948-1957 and 1968-1970 enrollment periods and those applications were also approved by the Secretary of Interior as well.

THE ARMIJA/THOMPSON FAMILIES: HISTORY AND ANCESTRY (DESCENT FROM THE ALSON OHLONE AND NEIGHBORING TRIBAL GROUPS (Magdalena Armija Thompson BIA Application # 10296)

Elias Armijo (Joseph Aleas) and **Delfina Guerrera** were full blooded Ohlone Indians and the parents of Maria Flora, Eduardo (Avelino), Margarita, Juan, Chrysanto, Magdalena and Gregonia Maria Armija. Both Elias and Delfina were listed on the **1870 Census** as living in Murray Township, Alameda County (page 103A, household # 59) on the Alisal Rancheria. At the top of the same census page are listed A. Burnell (Augustin Bernal) and his family (household #58). The next series of entries on the same census page identify some of the other **Verona Band** Indian households living on the **Alisal Rancheria**. The first family listed below A. Burnell (Bernal) is (#59) Alius, Hosea (Aleas, Jose), Indian, age 25 (b. 1845); his wife, Delfina, Indian, age 17 (b. 1853); and their two children Flora (age 4) and Avelino (Eduardo), age 1 (b. 1969) [1870 Census, Murray Township, Alameda County, page 103A].

The Armija's appear again 10 years later on the **1880 Census** living in Centerville, Washington Township, as Jose Aleas, Indian, age 37; Delfina, Indian, wife, age 23; and children: Maria Flora (age 18), Jesus Eduard (age 8), Maria M(argaret) (age 7), Juan C. (age 6), Chrisantos (age 4), Maria M(agdelena) (age 3), and Maria (Gregonia) (age 2 months) [1880 Census, Alameda County, page 517A].

On the 1900 Indian Population Census Washington Township, Alameda County, Jose and Delfina Armija's eldest son, Eduardo Armija, is listed under his mother-in-law Josepha Maria (Head of household), along with his second wife Jonah (Chona Bautista), and their son Narcisco; also listed are Eduardo's younger brother, Chrysantos and his wife Belle (Izabel Villanen); and Thomas Duncan (who was later married to Petra Inigo (Phoebe Alaniz) in 1903 (see Inigo family below) [Washington Township, page 291B].

Also listed on the **1900 Indian Population Census** for neighboring Murray Township (in Livermore) are **Phoebe Enigo** (Petra Inigo/Phoebe Alaniz) and her daughter, Mary Guzman. Living at Phoebe Inigo's residence (probably the same house that Susanna Nichols was born in) is **Magdalena Marshall (Armija/Thompson)**, who is identified as Lena Matlo, (widowed, age 22, b. May 1878). Petra Inigo was also the godmother to Magdalena's first child Rosa Bernal in 1895 (see below). At this time, Magdalena is pregnant with her son Henry Macho (Marshall) who was born on Dec. 11, 1900. Although not formally married to Joseph Machado (Marshall), Henry would be the first of two sons she had with him (see below). Also listed along with Magdalena is Carrie Matlo. Carrie Matlo is actually Carrie Calista Peralta, who was born October 14, 1898, and was the daughter of Magdalena's older sister, Margarita Armija and her second husband Antonio Peralta (see below). Petra Inigo was Carrie's godmother (see below). Petra Inigo and Carrie's older sister, Belle Stokes Nichols and brother, Joseph Aleas' BIA applications (#'s 10300 and 10299), their mother, Margarita died sometime around 1900 (Murray Township, page 23A).

Magdalena Armija is later listed on **Kelsey's 1905-1906 Indian Census** as "**Marthelina Marshall**" with one child (presumably her son Henry Marshall). She is also listed on the special Indian Census of 1905-1906 as living in Niles and "without land".

By 1908 or 1909 Magdalena married Ernest Thompson Sr. The **1910 Census** lists Ernest Thompson (Head of household), Lena, wife (age 33) and two children, Flora (1) and Henry Marshall (9) as living on Mission San Jose Road. Living next to them is Peter Sattos (Juarez) and his wife, Maggie (see Margarita Pinos), and Maggie's niece, Laura (Peregrina Pinos Santos' daughter, Erolinda Santos; (also see Daniel Santos' 1917 St. Augustine's baptismal record, Erolinda is identified as Laura Guarez below).

Jose Elias Armija's Family Lineage

Based upon the censuses and mission records, the family lineages of Jose Aleas and Delfina have been traced back several generations to the Seunen Ohlone tribe (Dublin/Livermore region) the "del estero" Alson Ohlone Tribe (Fremont/Milpitas/north San Jose plain) and the Tamcan Tribe (Byron region). Jose Aleas like many of the Indians of the **Verona Band** had many names and variations of the spelling of his name. He was known as Elias Armija, Jose Aleas, Jose de la Cruz Elias and others.

Jose Elias' father was Silvestre (Avendano) who was born February 26, 1800. It was from the baptismal information of his siblings Ancieto and Fermin that we know that they were from "del estero" which is the Fremont Plain within the **Alson Ohlone Tribal** territory:

1800 Feb 26, #29	2 Silvestre , Mission (del estero)
Born:	Feb 26, 1800
Father:	Crisanto (neofitos)
Mother:	Crisanta
Godparents:	Teodora Peralta

By 1842, Perpetua Ssauechequi married Silvestre Avendano sometime before 1842 and they had a son named Jose Elias who was baptized at Mission San Jose:

1842 Nov 6, #8167,	Jose Elias
Born:	Oct 1842 (1 month old)
Father:	Silvestre Avendano (MSJ # 292)
Mother:	Perpetua (MSJ # 1636)
Godparents:	Carlos Berrelleza & Maria Josefa Galindo

The records of Jose Elias' father was **Silvestre Avendano** who was baptized as Silvestre at Mission San Jose (MSJ Bapt. #292), and was of the **Alson** Ohlone Tribe which was located on the Fremont Plain.

Delfina Armija's Family Lineage

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r:

Delfina's ancestry is more complete than her husband Jose Elias Armija. Mission San Jose records indicate that Delfina's father was **Francisco Solano** and that his lineage is traced to the **Chupcan Tribe** of **Mt. Diablo/Walnut Creek** area and to the **Seunen Ohlone Tribe** of the **Dublin/Livermore** region. Francisco Solano's father was Primo Vueslla of the Suenen Tribe, his mother was Remedia Lal-iapa of the Chupcan Tribe.

By 1818 Primo and Remedia married and Remedia gave birth to at least two children: Ynez and Francisco Solano.

1819 Mar 17, #3970 Ynez (Neofitos)
not stated
Primo (#887)
Remedia (#1757)
Godparents: - Aurelia
Note: Ynez married Jose Liberato, her second husband, on June 26, 1840 (SJM #2391) and she was the grandmother of Chona Bautista Armija Andrade and great-grandmother to Cecelia Armija.

1828 Apr 8, #5881, **Francisco Solano*** (Neofitos) Apr 7, 1828 (born day before) Primo (#887) Remedia (#1757) Godparents: -Note: "Ilamada Tivasia...Hermana de Chiquetu..."

*Jose Guzman and Maria Colos shared with Harrington on October 14, 1929, the following recollections [probably dating back to around the time of the 1870 Ghost Dance] about the brother-in law of Francisco Solano, named Martin:

Martin was *cunado* (brother-in-law) of Inf's *tio* Francisco Solano. The wife of Martin was sister of Francisco Solano. Martin was good to land on top of the sweat house above San Leandro -- both inf. and Jose have heard him. He was an Akwena. He used to come to Pleasanton at times to. He was sermonero Iso (?) they called them in. Call it echando sermon. Might say also espichero. Buenas cosas hablan -how could I tell you all he says - aconsejando la gente, to all the people, to instruct man and woman heard all he said from temascal top there (Harrington reel 36:504).

Francisco Solano married Maria Soledad Castro. After considerable review of the Mission records there appears to be two Maria Soledads who possibly became the spouse of Francisco Solano and mother of Delfina.

Francisco and Soledad had the following four children together:

1849 Apr 29, #8415, **Maria de Jesus (Solano)**

Born:	Mar 1849 (2 months old)
Father:	Francisco Solano
Mother:	Soledad
Godparents:	Maria de la Cour & Guadalupe Bernal

1851, Jul 24, #8467, Delfina Sobien (Solano)

Born:	Feb	o, 1851
	Father:	Solano Jobien (Sobien)?
	Mother:	Soledad Cloc (Castro)
	Godparents:	Simon Roe & Maria Miranda

Note: Delphina was the mother of the Armija children (see below)

1856 Mar 22, #5735B, Jose Pascual (Solano)

Born:	Dec 1855 (4 months at baptism)
Father:	Francisco Solano
Mother:	Maria Soledad
Godparents:	Jose Caterino & Maria Nestava

Note: Jose Caterino was Leopardo/Rupardo Leyo's younger brother and Maria Nestava is probably Jose Elias (Aleas') first cousin (Perpetua's sister's daughter; see above).

1862 Oct, #224, Maria Benita Solano

Born:	Sep 16, 1862
Father:	Francisco Solano
Mother:	Soledad
Godparents:	Hippolito Suares & Refugia
Note: Benita (Benedi	cta) was the mother of Peregrina and Margarita Pinos. (see below)

Delfina married Jose Aleas (**Elias Armija**) around 1866/67 and later had the following children together:

1869 December, # 807, Eduardo Armigo (Armija)

Born:	October 3, 1869
Father:	Elias Armigo
Mother:	Delphina Maria
Godparents:	Porfinio Valensuela and C.(atherine) Gonzales*

*Note: Catherine Gonzales was the second wife of Philippe (Felipe) Gonzales (Petra Inigo's grandfather)

Eduardo Armija was first married to **Francisca Luecha** and they had a son named Joseph Armijo together (see below). The Luecha Ohlone Tribe was aboriginal to the Livermore area and whom were mostly missionized into Mission Santa Clara.

1890 Nov 23,	Joseph Armijo (Garcia)*
Born:	November 1, 1890
Father:	Eduardo Armijo
Mother:	Francisca Luecha*
Godparents:	Antonio Silva and Maria B. Yurrera (Benedicta Guerrera).

Note:* It appears that based on documentary evidence, Joseph Armijo was the same person as Angela Colos' grandson, Joseph Garcia who was raised on the Pleasanton/Alisal Rancheria and who was the father of Thomas Garcia and Alfonso Juarez and Daniel Santos.

Joseph Garcia after his baptism at Mission San Jose in 1890, next appears in the Book of Half Orphans at St Joseph's Orphanage at Mission San Jose dated December 1898. His was identified as Joseph Garcia, 8 years old, admitted May 30, 1898, discharged June 24, 1898, Indian, Place of Residence "Near Pleasanton." He appears next on the Indian Population Census of 1900 for Murray Township, identified as the grandson of Angela Colos who was listed as Uncela Carlans. Joseph Garcia was identified as being 9 years old and being born November, 1890. Joseph and Angela were living next to Phoebe Inigo, her daughter Mary Guzman, Magdelina Armija Marshall and her niece Carrie Calista Peralta and they were living several *casitas* away fromm his godmother, Benedicta Guerrera Pinos on the Alisal Rancheria.

Joseph Garcia next appeared at Pleasanton with his grandmother, **Angela Colos** on the **1905-06 Special Indian Census** which was conducted by Special Indian Agent C. E. Kelsey. Kelsey identified them as Angela Colos and **grandson**. They were living next to Trinidad Gonzales and Miguel Santos.

Angela Colos and Joseph Garcia next appeared on the **1910 Indian Population Census of "Indian Town**" in Pleasanton Township, Alameda County. On this census Joseph Garcia, age 20, was identified as Angela Colos' nephew. They were living next door to Jacoba, Catherine Peralta, Dario Marine, Beatrice Marine, Mercedes Marine and Frank Guzman.

Prior to April 1912, Mercedes Marine (Muwekma Vice Chairwoman Monica Arellano's greatgrandmother) was no longer with Francisco Arellano with who she had two children: Albert and Edwina. By this period of time Mercedes was with Joseph Garcia and they had a child named Thomas Garcia. After the death of Mercedes in 1914.

--1913 Feb 23, Page 39 Joseph Thomas Garcia [St. Augustine]

Born: Dec 29, 1912	
Father: Joseph Garcia	
Mother: Mercedes Marino	
Godparents: Jesus Espinosa & Phoebe In	igo (Alaniz)

Note: Thomas Garcia's grave location at the Golden Gate National Cemetery. He is located in Section Q Site 59. Thomas served in the US Army (Private) from July 30, 1942 to November 27, 1945.

Note: Francisca Luecha, Joseph Garcia's mother, was one of the last Luechas carrying her tribal name as a surname. The Luecha Ohlone tribe were aboriginal to the southern Livermore Valley (possibly around the Del Mocho Rancheria) and were brought into Missions Santa Clara and San Jose. Jose

Guzman informed Harrington that he learned the *Clareño* Ohlone dialect from the Luechas and the Santos families (Harrington notes see below).

Approximately six years later, Eduardo Armija, married Chona Bautista (Andrade) (BIA Application # 10297), and they had three children together including a baby girl named **Cecelia Armija** (see Marine Family History).

--1901 Mar 24, Page 140, Cecelia Armijo

, 0	ý U
Born:	Jan 24, 1901
Father:	Eduard Armijo
Mother:	Concepcione Gonzales
Godparents:	Carlos Nichols & Susanna Flores

Note: Eduardo Almeca (Edward Armija) was stabbed by Antonia Santo(s) at the True Vineyard was reported in the **Livermore Herald** on Dec. 7, 1901 (see below), apparently he later died from these wounds because on his daughter Cecelia's BIA application (see BIA Application # 10637) she testified that her father died around 1901. Cecelia Armija would first marry Lucas Marine prior to January 27, 1920. She later married Dario Marine around 1926, when Dario's wife Catherine Peralta went to live with Lucas and they had Ernest Marine together. On her BIA application, Cecelia said that she was born in Niles.

Jose Elias Armija and Delfina next have their third child, Margarita Armija in 1871. **Margarita Armija** was born on March 11, 1871 and passed away around 1900. Her godparents were Parelos Seyo and Valeriana Seyo who are **Rupardo Leyo** and Valeriana Carmelo (Leyo). She was the mother of Isabelle S. Olivares (Belle Stokes) and Joseph Aleas (see below).

1872 June, #1029, Margaret Armijo

Born:	March 11, 1871
Father:	Elias Armijo
Mother:	Delfina Agorrera (Guerrera)
	Godparents: Parelos Seyo and Valeriana Seyo

Note: Parelos Seyo is Rupardo Leyo (Leopardo), who is also the grandfather of Susanna Nichols and Francisca Nonessi. Rupardo's second wife was Valeriana Carmelo.

Margarita Armija has a relationship with Joseph Olivares and they have two children together, Belle Stokes Nichols and Joseph Aleas:

Belle Nichols (BIA Application # 10300) born 2-19-1890. Belle was the wife of Joseph Nichols (Susanna Nichols' son). On her BIA application, she stated that her maiden name was **Belle Stokes** and that her mother was Margarita Armija who died about 1900. She also stated that she is the niece of Magdalena Thompson. Phoebe Alaniz and (Magdalena's oldest daughter) Flora Emma Thompson Martel signed as witnesses for her on her BIA application on October 7, 1930. Belle's Mission San Jose Baptism record identifies her as Isabelle S. Olivares. The S. in her middle name most likely was Stokes:

1890 March 12,	Isabelle S. Olivares (Indian)
Born:	February 19, 1890
Father:	Joseph Olivares
Mother:	Margarita Armija
Godparents:	Emmauel Pastor* and Susanna Flores

Note: Manuel Pastor and wife are listed by Kelsey at Pleasanton 1905-1906.

By 1919 (based upon the information on the 1930 census) Belle Stokes Armija (Margaret Armija's daughter) had married Joe Nichols, however they had no children. On the **1930 Census** Belle (age 40) and Joe Nichols (age 48) were living on "J" Street in Niles, four houses from Susanna Nichols household.

Joseph Francis Aleas (BIA Application # 10299) was born 5-11-1893, near Pleasanton. His mother was Margarita Armija and he lists Elias Armija and Delfina Guerrera Armija as his mother's parents. He also stated that "I am the full brother of Belle Nichols, Niles, Ca. I am a nephew of Magdalena Thompson, Newark, Alameda County, Ca. Flora Emma Thompson Martel signed as a witness on October 11, 1931.

 --1893 Aug 20, Page 20, Elliam (Joseph Aleas) Ermijia (Armija) (Indiano)** Born: May 11, 1893 Father: Incognito (probably Joseph Olivares) Mother: Margarita Esmijia (Armija) Godparents: Antonius Sasuro & Jacoba Hilibra*
 Note: Jose Antonio and Jacoba were Joseph Aleas' godparents.

June 30, 1916 - Joseph Aleas served in the US Army during World War I, and made rank as "Sergeant in Company D, (14th Infantry Brigade) 21st Machine Gun Battalion, 7th Division." His Army record indicates that he enlisted on June 30, 1916 (age 23) in San Jose, California and was discharged at Camp Funston, Kansas on July 9, 1920. Joseph was awarded the World War Victory Medal and the Bronze Victory Button. Information about the 21st Machine Gun Battalion, 7th Division is provided below. (see 7th Division information below)

1920 Census - Joseph Aleas was still residing at Camp Funston, Riley, Kansas when the **1920 Census** was taken on February 23rd. The information on the census shows the U. S. 7th Division, Joseph Aleas, age 26, soldier, 21st Machine Gun Battalion.

On the **1930 Census, Joseph Aleas** was living in Newark, on **County Rd**. near Thornton, he was single, age 37, **Indian** "Full Blood, Digger), and working as a "stove mounter" at a stove foundry (this was the same work done by Pete Juarez at this time). He is also identified as a Veteran of WWI.

April 26, 1942 – Joseph Francis Aleas (Serial # U937) was living at the Butler Hotel in Newark, California. His WW II Registration Card stated that he was born in Pleasanton, California on May 11, 1893 and his contact person was George Butler of Newark. His employer was James Graham Manufacturing Co. of Newark. Joseph was age 48, height 5'9 1/2" and weighed 190 lbs.

July 13, 1964 - Joseph Francis Aleas passed away **July 13, 1964** and was buried at the Gold Gate National Cemetery Plot Z, grave 2597).

In 1876, Jose Elias and Delfina had another son named Joseph.

1876 December 8, #14	476, Joseph Chrisanthum* (Indian)
Born:	October 31, 1876
Father:	Elia Armigo (Elias Armija)
Mother:	Delfina Simona Guerrera
Godparents:	Michael de Pastor & Eccelsa de Pastor (Celsa)

*Note: Chrysanto Armija and Belle were listed on the 1900 Indian Population Census for Washington Township (Niles). Chrysanto was identified as Chris Armica married, age 24 and Belle Armica was identified as being married, age 33 and having one child, however, the child is not identified and could not be Rosa. Five years later, Chrysanto was listed on Kelsey's 1905-1906 Indian Census as Chrysanto Amigo. Although Chrysanto was listed as being single, living in Niles and "without land", on the other side of "Santos, Teresa and child" (probably Joseph Nichols, Teresa Santos and Andre Nichols born 1905; see above), Kelsey identified "Kid Small" and "Belle" whom no doubt were his child Rosa and his wife Izabel Villanen. Chrysanto was presumably living close by to his sister Magdalena Armija (identified as Marthelina Marshall) in Niles on the Kelsey Census.

Chrysanto Armija was listed on the **April 16, 1910 Census for Washington Township** as **Chistorpher Armego** living on Sheridan Road near Mission San Jose Road. He was living 12 houses away from Pete and Maggie Juarez and his sister Magdalena Armija and Ernest Thompson (then living of Mission San Jose Road).

Almost two years later, Chrysanto Armija died on **March 6, 1912** from "pulmonary tuberculosis." He was identified as Chris Armigo on his death certificate which provided the following information: he was treated in the Alameda County Infirmary in San Leandro, listed as divorced, date of birth November 1, 1875, age: 36 years, 4 months, 5 days, Laborer, birthplace: California, father: Joe L. Armigo, mother: Delphina, informant: Ino. **S. Martin**(?) and was to be buried in the **Centerville Cemetery**. In the Burial Permit Book for Mission San Jose and Niles (1909-1920) it stated that he was buried on March 8, 1912 and Burial Place: "Indian, Mission San Jose."

A year and a half later, Jose and Delfina have another child named Maria Gregorian Magdalena.

1878 September 8, #1708, Gregorian Magdalena Armigo (Armija) [Indian]

Born:	May 26, 1878
Father:	Elia Armigo
Mother:	Delfina Herrera (Guerrera)
	Thomas Enigo and Maria Trinidad Gonsales (Gonzales)

Magdalena (**Armija**) **Thompson** (**BIA Application # 10296**) was a full blooded Indian born 5-27-1877. Her BIA application list her children as Emily Thompson (b. 10-31-1910), Ernest Thompson (b. 4-21-1912), Eduardo Thompson (b. 7-21-1914), and Lorenzo (Lawrence) Thompson (b. 9-9-1918). Ernest Thompson Sr. (an American) was her husband at the time of her enrollment. Earlier in 1895, Magdalena had a daughter with Antonio Bernal. Joseph Marshall (Machado) [died about 1928] was her first husband and they had two sons named Roberto and Henry Marshall. Some time around 1908 she married Ernest Thompson. On her BIA application she identified her father as Elias Armija (died about 1880) and her mother as Delfina (Armija) Guerrera (died about 1884). Both of them were born in Alameda County. Delfina's mother was Soledad Guerrera (Maria Soledad Castro). Phoebe Alaniz (Petra Inigo) witnessed her application on October 7, 1930 that she knew Magdalena and her mother for 45 years. Magdalena's children were:

1895 Jan 26,	Rosa Bernal (Indian)
Born:	Nov 20, 1894
Father:	Antonio Bernal
Mother:	Magdalena Armina (Armija)
Godparents:	Manetta Cosmo (Manuel Santos?) & Petra Igo (Inigo)

---1901 Feb 10, Page 139, **Henrique Macho** (Indians) [Henry Marshall] Born: Dec 11, 1900 Father:Joseph Macho (Marshall)Mother:Helena Harremiga (Magdalena Armija) "Indians"Godparents:Charles Nikles (Nichols) & Maria Thereza

Notes: Henry Marshall went by the name Henry Noya Marshall. There was a Joseph Noya who was a godfather to several of the Muwekma/Verona Band members (see Ernest Marine 1926). Henry Marshall was not living with his mother and stepfather Ernest Thompson at the time BIA enrollment in 1929-1932. On Henry's son Joseph Marshall's birth certificate. The family was living on 309 E. 22nd Street in Oakland and Henry worked as a punch press operator for Kilroy Machine Co. Henry did enroll during the 1968-1972 enrollment period on March 10,1969. At the time of his enrollment (Application 20833) the family was living at 1618 Graham Way in San Leandro. Henry identified Ernest Thompson as his ¹/₂ brother.

Henry Marshall's Family History

Sometime around 1924, Henry Marshall married Anna King of Newark and they had their first child Henry Vernon Marshall on June 27, 1925 and their daughter, Mary Gloria Marshall on September 3, 1926. Both children were baptized at St. Edwards Church in Newark:

--- 1925 August 15, Page 63, Henry Vernon Marshall [St. Edwards]*

0 ,	
Born:	June 27, 1925
Father:	Henry Marshall
Mother:	Anna King (Newark)
Godparents:	Joe Nichols & Rose Drennan (King)

Henry Marshall, Jr.'s BIA # is F12397. Henry served in the United States Marine Corps (Sergeant) during WW II in the Pacific Theater (Lynn Stinnett interviewed 8/16/06). Henry Marshall, Jr. passed away on September 24, 1986 and is buried in Castro Valley (Lone Pine or Tree Cemetery).

Henry Noya Marshall Sr's Social Security Application dated December 3, 1936 identifies him as living at 641 Ash St. Newark, Ca. He was working at James Graham Mfg. Co. Newark, Ca. Age 36, born December 11, 1900, Centerville, Alameda County, Father: Joseph Noya Marshall; mother Madalaine Armeha (Magdalena Armija).

On the **1930 Census, Washington Township, Newark Town**, Henry Marshall, Sr. (age 28), was living on Thorton Avenue with his sister Flora Emma Thompson Martin (Martel) (age 21), her husband Joseph Martin and their daughter Laura May Martel. Living in the same household was Henry's wife Anna King (17), their son Henry, Jr. (5), daughter Gloria (3 ¹/₂), and Anna's sister Rosie King. Both Henry Marshall and his sister, Flora were identified as In(dian) by Census taker Etta M. Biddle. Henry worked as a "stove mounter" for the "stove foundry." Fay says Henry worked at Wedgewood in Newark.

Henry Marshall, Sr. **died in 1982** and according to his daughter Margaret Ariza, he was cremated and his ashes were scattered over Sunol.

Sometime around 1908, Magdalena married Ernest Thompson. Ernest Thompson worked for Southern Pacific Railroad and helped provide a stable household for Magdalena's family. In 1909, Ernest and Magdalena have their first child together, a daughter named Emily. Emily went by her middle name Flora during her lifetime.

---1909 July 10, Page 40, **Emila Flora** (St. Augustine) Born: March 7, 1909 Father: Ernest Thompson Mother:Madelena AmigoGodparents:Jose Rejis (Reyes) & Margarita Pinos

Flora Emma Thompson Martel (BIA Application #10294) was born 3-7-1909 and is listed with her daughter Laura May Martel (born 3-2-1928). She listed her maiden name as Flora Emma Thompson and her father as Ernest Thompson and mother Magdalena (Armija) Thompson. Magdalena Thompson and Joseph Alias (Aleas) are witnesses on her application dated October 11, 1931.

---1910 Dec 10, Page 261, Maria Amelia Tomson (Emily Thompson)

Born:Oct 29, 1910Father:Henrico Tomson

Mother: Magdalena Armija

Godparents: Eulalio Gonzales* & Margarita Pinos

*Note: Eulalio (Eulario) Gonzales was Maggie Pinos' Uncle (see BIA Application # 10676)

Emily Dewey died in 1981. Her obituary stated that:

"... She was 71. Mrs. Dewey was a native of Sunol and had worked at the Sunco Cafe. She is survived by two daughters. Maxine Blair and Jackie Dewey, both of Fremont, two brothers, Lawrence Thompson and Ernest Thompson, both of Oakland, nine grandchildren, and seven great-grandchildren. ... Burial will be at Irvington Memorial Cemetery."

---1912 Aug 25, Page 287, George Ernest Thompson (Newark)

0,0	
Born:	Apr 20, 1912
Father:	Ernesto Thompson
Mother:	Madelina Armija
Godparents:	Georgus & Peregrina Santos

Ernest Thompson worked as a security guard after Alcatraz Island prison closed. He passed away in **1984**. His son Karl Thompson is a Muwekma Tribal Councilman.

---1914 Aug 22, Page 312, Eduard Thompson

Born:	Jul 24, 1914
Father:	Ernesto Thompson
Mother:	Madeleina Adanica (Armija)
Godparents:	Raymondus & Dora Musquez

Note: Edward Thompson never married and passed away on March 21, 2002 and was buried on March 26, 2002.

---1916 Dec 16, Page 333, Charles Thompson

Born:	Aug 10, 1916
Father:	Ernest Thompson
Mother:	Magdalena Thompson
Godparents:	Margarita Pinos & Petrus Juarez

Note: Charles Thompson died as a child and is buried in the **Ohlone Indian Cemetery** on Washington Boulevard, Fremont (see interview with Lawrence Thompson, Sr. and Marine Family History 1965).

September 12, 1918 - Draft Registration Card - George Ernest Thompson, residing in Newark, Alameda County, age 44, dob: September 3, 1876, Stock Clerk for Jason Graham Co., Newark, wife: Madeline Thompson. Newark. Hayward Draft Board.

1918	 Lorenzo (Lawrence) Thompson	
	Born:	Sep 9, 1918
	Father:	Ernest Thompson
	Mother:	Magdalena Armija Thompson

Lawrence Thompson was a Tribal Elder and an elected Tribal Councilman. He was living in San Francisco when he enlisted at the age of 23 on September 10, 1941 at the San Francisco Presidio. Lawrence attained the rank of Technician Fifth Grade (Dog Tag 39 011 265) served in the Pacific Theater in the 640th Tank Destroyer Battalion, U.S. Army. He was honorably discharged on October 2, 1945 at Camp Beale, Marysville, California and received the **American Defense Service Medal**, **Asiatic Pacific Campaign Medal** and **Philippine Liberation Ribbon with Bronze Star**.

Magdalena Armija Thompson passed away shortly after she enrolled with her family with the BIA in November 1931. She was buried at the Holy Ghost/Centerville Cemetery on November 23, 1931. Her grave is located at aisle 25, row 6B. Mr. Ernest Thompson, Sr. after Magdalena's passing had married Trina Marine around 1933.

The families descended from Magdalena Armija Thompson are enrolled in the Muwekma Tribe. **The Armija Family Ancestry** is traced through several generations of Indians. The following is a basic genealogical tree:

Radegunda (Chupcan Tribe/Bay Miwok)			
 Primo VuesllaRemedia I (Seunen) (Chupcan)	-		
Francisco Solano 4/4Maria Soledad Castro 4/4 Silvestre Avendano 4/4Perpetua 4/4 (Alson Ohlone) (Chupcan)			
Delfina Guerrera 4/	/4	Elias Armija 4/4	
(b. 1851 d. about 18		(b. 9/6/1842 d. about 1880)	
(0. 1051 d. dout 1		(0. <i>9</i> /0/10/12 d. doodt 1000)	
Margarita Armija 4/4 Ma	agdalena Armija Thompson 4/4	Eduardo Armija 4/4	
(b. 1871 d. 1900?) (b	orn 5-27-1877 d. November 19	31) (ma.) Francisca Luecha 4/4 1 st wife	
		Joseph Armijo (Garcia)	
		(born 1890)	
		Chona Bautista 4/4 2 nd wife	
Belle Stokes (Nichols)	Rosa Bernal	Cecelia Armija Marine	
[bapt. Isabelle S. Olivares]	Henry Marshall ⁴	(born 1900 – d. 1949	
(born 2-19-1890)	Roberto Mach (Marshall)		
Joseph Aleas	Flora Emma Thompson Marte	el	
(born 5-11-1893)	Emily Thompson		
	Ernest Thompson		
	Eduardo Thompson		
	10		

MARIA DE LOS ANGELES COLOS' FAMILY: HISTORY AND ANCESTRY WITH TIES TO THE LUECHA OHLONE TRIBE

Maria de los Angeles (Angela) Colos was one of the principal Chocheño Ohlone-speaking linguistic consultants for many anthropologists. She was interviewed by Kroeber (1904 and 1909), C. Hart Merriam (1905-1910), E. W. Gifford (1914), J. A. Mason (1916) and J. P. Harrington (1921-1930). Maria died prior to 1930 (around 1929), before she was able to enroll with the BIA.

Maria de los Angeles's ancestry has been traced through her recollections and **Mission Santa Clara** and **Mission San Jose** records. Maria was the daughter of Zenon (a neophyte from Mission San Rafael who was probably of Napian/Karkin or Choquoime ancestry), and **Joaquina Pico** (whom Maria thought was a Tamaleño meaning Coast Miwok). Joaquina who as a young woman most likely worked for Antonio Maria Pico who was the **Alcalde of Pueblo de San Jose** and also for the Bernal family while residing on their Santa Teresa Rancho located in south San Jose. Later Joaquina Pico settled and worked on the Rancho de San Ramon (perhaps living on or near the East Bay San Lorenzo Rancheria). After the departure or death of her husband Zenon, a Koriak Russian man, named Gregorio Colos, lived with Joaquina and helped raise the children and they took on his surname. Perhaps even earlier, based upon John Peabody Harrington's interview with Angela in the late 1920s when Joaquina was most likely widowed, an Ohlone Indian named Santiago Piña became Angela's stepfather.

By her own accounting to Harrington, Maria de los Angeles said that she was born on the ranch of **Don Agustin Bernal in Santa Theresa**, south San Jose. Angela informed Harrington that she learned to speak Chochenyo from her step-father, Santiago and his parents. Santiago's lineage has been traced through the Mission San Jose records. Santiago's parents were **Bruno** and **Fermina**. Bruno (SJO-B 201) was born 1796 and his tribal group was identified as "Este" in the Mission San Jose Baptismal records [referring to the **Taunan Ohlone Tribe of the Alameda Creek and Del Valle Creek** drainages (**Sunol/Pleasanton/Livermore region**). Bruno was baptized at Mission San Jose on July 27, 1799 and the record identifies his Indian name as **Chaucsacsi**. Bruno's godfather was *Californio* Luis Maria Peralta (**Rancho San Antonio, Peralta Land Grant** of the greater Oakland area). Bruno's parents were identified as Homum (gentile not baptized) and his mother Garbasi (SJO-B 747). Bruno died on February 2, 1823 (SJO-D 2964).

Fermina (SJO-B 1520) was born around 1801 and was identified as a <u>Luecha</u> (Ohlone) on her Mission San Jose baptismal record dated January 21, 1806 [also see Francisca Luecha below] whose tribal territory included the **del Mocho/Corral Hollow Creek** drainages of the greater Livermore area (see Milliken 1995). Fermina's Indian name was Lapermin and the Mission San Jose records indicate that she died on June 19, 1823 (SJO-D 3011). Her father whose Indian name was Sonoc was also from the **Luecha** Ohlone Tribe. He was baptized with the Christian name Onesimo at Mission San Jose on February 17, 1806 and he later died in August 1815.

Santiago Pina (SJO-B 4075) himself was born November 6, 1819, baptized a day later and was raised by the *Californio* Pina family, hence his surname. The Pina surname might actually have been Pico as in the case of his wife Joaquina Pico or taken from Corporal Lázaro Piña who had come to California in 1819 and received the Rancho Aqua Caliente land grant in Sonoma County by Governor Juan Alvarado in 1840. Santiago Pina's death date was not recorded in the mission records, therefore he must have lived at least through the late 1850s or 1860s and possibly later. Joaquina as stated above worked for the Pico family living in San Jose as one of the Indian servants and she eventually moved to the Bernal Rancho located in the Santa Teresa Hills, where Angela was born.

Mission Santa Clara records indicate that Maria de los Angeles' parents, Zenon and Joaquina, were married at the Mission in 1838. Joaquina was listed as a neophyte from Mission San Jose.

1838 October 16, #2711, Zenon & Joaquina

"En 16 de 8bre de 1838 en la Yglecia de esta Mision...case y vele a los siguientes...A un Neofito (orginario de la Mision de S[an] Raf[ae]l y recidente en el Rancho de los Vernales) llamado Zenon con una Neofita de S[an] Jose llamada Joaquina."

Angela's given name was Maria Asuncion de los Angeles. Angela shared with Harrington the tragedy of the death of her younger brother, Prudencio (Ponciano) who died at the age of 14 of a hemorrhage on Moraga's Ranch, in the East Bay. She also informed Harrington that her "younger half-sister, Maria Antonia Pina" grew up in San Rafael on the Dona Maria Jesus Briones ranch and died there (handwritten notes:47-48).

1840 Feb 2, MSJ #7774, Maria Asuncion de Los Angeles [Mission San Jose]

Born	nina
Father:	Zenon
Mother:	Joaquina
Godparents:	Anacleto

1846 May 4, MSJ#83	70, Ponciano (Yndigeno)
Born:	Dec 1845 (6 months old)
Father:	Zenon
Mother:	Joaquina
Godparents:	Manuel & Maria Presentacion

1848 May 15, MSJ#8401, Maria Antonia (Neofitos)

Born:	Apr 18, 1848
Father:	Zenon
Mother:	Joaquina
Godparents:	Jose Vicente Estudillo & Juana Martinez

~ 1858 - Ramon Sunol.

On the **1880 Census** for **Murray Township** (**Pleasanton**), Alameda County (District 26), an Indian man named **Ramon Sinol** (**Sunol**), estimated age 22 (born ca. 1858) was listed as a farm hand in the house hold of John Kottinger. Ramon (Raymond) Sunol was in all likelihood Angela Colos' and Raymundo Sunol's son, **Joseph** who was born in 1862 (see below).

By 1862, Maria de los Angeles had a child with Jose (Raymundo Bernal/Sunol?), a son named Joseph who was baptized at Mission San Jose. Based upon mission baptismal and marriage records Maria's husband was most likely Jose Raymundo Bernal, a Clareño Ohlone Indian who was baptized at Mission Santa Clara (see below).

1862 Oct 26, #225, Page 46, **Josephus** (Indios)

Born:	Sep 26, 1862
Father:	Jose (Raymundo Bernal)
Mother:	Maria de los Angeles
Godparents:	Petura? (Vincent?) & Refugia

In the Alisal Indian rancheria community there was a Clareño Ohone man named Raymond Bernal, who was also identified in other San Jose Mission records as Raymond Sunol. **Mission Santa Clara** baptismal records identified a child by the name of Jose **Raymundo** (Bernal) who was baptized on April 10, 1842 (MSC Baptism # 10219). He was identified as the son of (Jose?) **Domingo Berna**l and **Maria Tacia Sunol** who were both listed as "neofitos". His godparents were *Californio* **Antonio Bernal** and Eusebia Valencia. Milliken suggests that his parents were most likely baptised at Mission San Jose. Raymundo Bernal was married to a Mission San Jose woman named Angela Cornelia (who appear to be Angela Colos). Angela would have been age 22 or 23 in 1862 at the time of Joseph's brith (see above baptismal record).

~1866 – Francisca Luecha. Based upon the 1880 Census, Angela Colos and Raymundo had a daughter named Francisca (Luecha) sometime around 1866. Angela would have been age 26 at this time. Francisca probably took her surname from Santiago Pina's mother's tribe -- the Ohlone-speaking Luecha.

~1869 – Juana. Also based upon the 1880 Census, Angela and Raymundo had a second daughter named Juana sometime around 1869. Angela would have been around age 29.

Raymundo Bernal (Sunol) and Maria de Los Angeles Colos had their second son, named Joaquino, in 1871. He was baptized at Mission San Jose in 1872:

1872 May 15, #1046, Page 211, Joaquino Guadalupe Sunol* (Indiei)

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Born:	Jul 7, 1872 (probably 1871)	
Father:	Raimundi Sunol	
Mother:	Angela Cornelia (Colos)	
Godparents:	Franciscus Garcia & Jesus M. Refugio	

*Note: Joaquino was listed on the **1900 Washington Township** [Niles] Indian Population Census as Jauloope Sunol (age 27). He was living next to Muwekma Ohlone ancestor George Santos and his family in Niles. Raymundo and Lupe Bernal were both remembered by Muwekma Elder Dario Marine in 1965 when he identified the Ohlones of California as the Tribe was involved in protecting their Ohlone Indian Cemetery located in Fremont.

In 1873, Maria de los Angeles and Raymundo Bernal (Sunol) joined with other Muwekma Indian couples of the **Verona Band** to renew their marriage vows at Mission San Jose. As mentioned elsewhere, this was done during the height of the **1870 Ghost Dance** religious movement and these renewal of vows might have been influenced by the Ghost Dance doctrine which was practiced at Pleasanton.

1873 May 30, #212, Page 62, Jose cum Refugia - This entry holds three marriages.
"Die 30, May 1873, coram Maria Selio et Raimundo consentium renovavares J.o Jose cum Rafaela; 2.
Reimendums Bernal (Sunol) et Maria de los Angeles 3. Maria con Selso.

In 1875, Raymundo and Angela had their third son, Eduardo and his was baptized at Mission San Jose in 1875:

1875 Dec 19, #1378, Page 262, Eduardo Sunol*

Born:	Oct 13, 1875
Father:	Raymundo Sunol

Mother:Maria (de los Angeles)Godparents:Philippo & Maria Catharina Gonzales

*Note: Eduardo (age 5) was listed on the 1880 Census as the "grandson" of Felipe and Catherine Gonzales (his godparents).

A half year later, in 1876, Angela apparently was widowed from Raymundo Sunol (Bernal) and shortly married Joseph Thomas Matthia Volvono. In this marriage record, Angela is identified as being around 35 years old (making her birth date 1841). This Mission San Jose marriage record clearly identifies her as Maria los Angeles Colos.

1876 June 8, #281, Page 76, Volvono et Colos (Indigeni)

"A.D. 1876, die 8 Junii, Rev. J. Valentini mat jinxit **Joseph Thomas Matthaeum** natam annos circiter 40, ex Francisco Volvono* et Maria Rufina, et **Maria los Angeles Colos**, viduam Joannis, natam annos circita 35, ex **Zenone** et **Maria Joaquina** coram Petro Antonio et Johanna Maria Rubio.

*Note: Francisco Volvono kept his tribe's name (**Volvon**), in the same way the **Luechas** kept theirs. The Volvon were aboriginal to the Mt. Diablo region with presumable marriage ties to the surrounding tribal groups

In 1877, Joseph Matteos and Angela Colos had a daughter named Aloisia (Luisa):

1877 Sep 30, #1575, Page 285, Aloisia (Indian)

Born:	Aug 25, 1877
Father:	Josepho Thomas
Mother:	Maria de los Angeles
Godparents:	Josephus M. Morales & Maria C. Morales

On the 1880 Census for Murray Township (Pleasanton) Angela was listed as a **widow** and living with her daughters: **Francisca** (Luecha), Indian, age 14 (born ca. 1866), Juana, Indian, age 11 (born ca. 1869), Louisa (Aloisia?), Indian, age 6, Rita (Aloisia?), Indian, age 2. Angela Colos and her family were living eight houses away from Antonio Bernal, Jr. near Pleasanton.

In 1883, Angela Colos had been widowed since at least 1880 and she appears to have given birth to another son with an Indian man named Luiz Miranda (possibly the brother of Monica Miranda):

1883 Sep 23,	Liviano Tiburcio (Indian)
Born:	Aug 11, 1883
Father:	Luiz Miranda
Mother:	Maria de los Angeles
Godparents:	Ignacio Jusiho (Vinoco)? & Monica Miranda

Francisca Luecha: one of Angela Colos' Daughters

Little details are known about the life and family of Muwekma Ohlone Francisca Luecha, however based upon various records she is the daughter of Maria de los Angeles Colos. Francisca was perhaps the last person of her tribe who carried the **Luecha** name. The Luecha, as mentioned above, was a Chocheño Ohlone-speaking Tribe which was aboriginal to the southern Livermore Valley centering around Arroyo del Mocho (an area that probably included the del

Mocho Rancheria) and Corral Hollow Creek drainages. In the 1920s and 1930s Muwekma Elders Jose Guzman and Angela Colos shared with J. P. Harrington what information they knew about the Mission Santa Clara **Santos** families whom were from the Luecha Tribe.:

Based upon Angela and Jose Guzman's recollections, the **Santos Family** appear to be aboriginal to Santa Clara Valley and are possibly related to Juan and Elena Santos (the last Ohlone Indians baptized at Mission Santa Clara) whose son Camilo (MSCL-B #10923) was baptized in 1849 by the mission Fathers. This possibility helps tie in Angela's statement that "the Clareños and Chocheños were much intermarried, their languages were similar, Muwekma - La Gente". Harrington's Clareño notes cites the following: "Infs (Maria de los Angeles) comadre Maria Ventura and an uncle of hers named Santos ... both of them were baptized at Santa Clara Mission" (323 printed notes).

As mentioned above, Francisca Luecha appeared in the Mission San Jose records as a godparent, for Dominic Sierra:

1882 Aug 27, Page 107, **Dominic Sierra**

Born:	Aug 4, 1882
Father:	Paulo J. Sierra
Mother:	Vincentia Jali
Godparents:	Raymond Sunol & Francisca Luecha

In 1884, Francisca Luecha had a daughter with Francisco Alta Miranda who was baptized at Mission San Jose in 1884:

1884 Apr 27, Page 144, Maria Rita Miranda (Indian)

Born:	Apr 5, 1884
Father:	Francisco Alta Miranda*
Mother:	Francisca Luecha
Godparents:	Maria Antonia Lunes (probably Suarez)

Six years before Muwekma Elder Eduardo Armija married Muwekma Chona Bautista, he had a child with Francisca Luecha named Joseph Armijo in 1890. Joseph was baptized at Mission San Jose that same year:

1890 Nov 23, Page 264, **Joseph Armijo** * (Indian)

, 0	
Born:	Nov 1, 1890
Father:	Eduardo Armijo
Mother:	Francisca Luecha
Godparents:	Antonio Silva & Maria B. Yurrera (Benedicta Guerrera)

*Joseph Armijo was for some unknown reason (perhaps through mis-hearing his name) later renamed Joseph Garcia at the Mission san Jose's St. Joseph's Orphanage. He was raised on the Pleasanton/Alisal rancheria and later was the father of Muwekma Mercedes Marine's son Joseph Thomas Garcia and Muwekma Erolinda Santos's eldest sons Alphonse Juarez and Daniel Santos (Saunders).

[1898] Joseph Armijo/Garcia next appears after his baptism at Mission San Jose, on the Book of Half Orphans at St Joseph's Orphanage, Mission San Jose in December 1898. His was identified as "Joseph Garcia, 8 years old, admitted May 30, 1898, discharged June 24, 1898, Indian, Place of Residence near Pleasanton."

[1900] He appears next on the Indian Population Census of 1900 for Murray Township (Alisal Rancheria Pleasanton). He was identified as "Joe Carsise" and was listed as the grandson of Angela Colos who herself was identified as "Uncela Carlans". Angela was also identified on the census as having given birth to 12 children. Joseph was listed as being 9 years old and being born November, 1890, the same month and year as Joseph Armijo's birth. Joseph Garcia and Angela Colos were living next to Muwekma Indians Phoebe Inigo, her daughter Mary Guzman, Joseph's aunt Magdalena Armija Marshall and her niece Carrie Calista Peralta and living several casitas [houses] away from them on the rancheria was his godmother Benedicta Guerrera Pinos.

[1905-1906] Joseph Garcia next appeared still living on Pleasanton Alisal Rancheria with his grandmother Angela Colos on the **1905-06 Special Indian Census** conducted by C. E. Kelsey. Kelsey identified them as Angela Colos and grandson. They were living next to Muwekma Indians Trinidad Gonzales (Phoebe Inigo's mother) and Miguel Santos.

[1910] Angela Colos and Joseph Garcia next appeared on the 1910 Indian Population Census of "Indian Town" in Pleasanton Township. On this census Joseph Garcia was identified as Angela's nephew and age 20. They were living next door to Muwekma Indians Jacoba Antonio, Catherine Peralta, her husband, (D)ario Marine, Beatrice Marine, Mercedes Marine (see below) and Frank Guzman. Also listed on this census Muwekma Indians Miguel and Selsa Santos, Albert Marine, Phoebe Inigo, Trinidad Gonzales and Jose Reyes.

Mercedes Marine was born in 1895 and *Capitan* Jose Antonio and *Mayen* Jacoba were her godparents at Mission San Jose. Sometime after the death of her mother Avelina Cornates Marine in October 1904, Jacoba helped raise Mercedes (see 1910 Indian Census).

1895 Oct 19, Page 65, Maria Mercedez Marin*

Born:	Sep 2, 1895
Father:	Joafaele [Rafael] Marin
Mother:	Abelina Cornates (Avelina Cornates)
Godparents:	Josephus Antius Sasugo & Jacoba Kilibury
	(Capitan Jose Antonio & Jacoba Sasuyo) ¹

Mercedes Marine had two children with Francisco Arellano and afterwards her third with Joseph Armija/Garcia. Both Joseph Garcia and Mercedes Marine were living next to each other on the Alisal Rancheria in 1910.

Mercedes Marine and Francisco Arellano had their first son, Alberto Marine Arellano on January 13, 1909 and he was baptized at Mission San Jose:

1909 August 8,	Alberto Areano (Arellano)
Born:	Jan 13, 1909
Father:	Francisco Areano
Mother:	Mercedes Marin
Godparents:	Pedro Gonsalves & Maria Neis* (Suarez/Santos)

Their second child was named Edwina Arellano who was baptized at St. Augustine's Church in Pleasanton in 1911:

--1911 Feb 1, Page 23 Edwina Dias (Arellano) [St. Augustine] Born: Jun 29, 1910 Father:Franciscus DiasMother:Mercedes MarinoGodparents:Isabella (Elizabeth) Marino

Mercedes third child, Joseph Thomas Garcia was born in 1912 and baptized at St Augustine's Church in 1913:

--1913 Feb 23, Page 39 **Joseph Thomas Garcia** [St. Augustine] Born: Dec 29, 1912 Father: Joseph Garcia Mother: Mercedes Marino Godparents: Jesus Espinosa & Phoebe Inigo (Alaniz)

Thomas Garcia grew up in Livermore area, worked for the railroads, and served in World War II in the U.S. Army, **Co. F. 358th Engineers Regiment**. He died on **February 9**, **1956** and was buried in the Golden Gate National Cemetery. Thomas Garcia was Angela's one of three surviving great-grandsons.

THE MUWEKMA MARINE-RELATED LINEAGES FROM THE EAST BAY

The greater Oakland, San Leandro, Castro Valley, Hayward, Lafayette, Concord and Walnut Creek areas have specific meaning to the enrolled lineages in the Muwekma Ohlone Tribe. One of the direct ancestors was **Liberato Culpecse** who was from the **Jalquin** and **Saclan** tribal territories of the greater east Bay region. Liberato's mother, **Obdulia Jobocme** who was also of the **Jalquin Ohlone [Chocheño]**-speaking tribal group was baptized at Mission Dolores (SFB # 2436) on May 17, 1802. Liberato's father, **Faustino Poylemja** was from the **Saclan** Bay Miwok-speaking tribal group, and he too was baptized at Mission Dolores on December 18, 1794.

It was into the complex and rapidly changing world of the emergent Hispanic Empire, that Liberato Culpecse, at the age of 14 years old (born 1787) was baptized on November 18, 1801 at Mission Dolores, along with other members of his tribe. Seven years later in 1808, Liberato Culpecse had married his first wife **Catalina Pispisoboj** and she died three years later on October 16, 1811. Catalina's family was from the **Huchiune Ohlone [Chocheño]**-speaking (from the **Oakland-Richmond** area) and the Habasto Coast Miwok-speaking tribal groups.

After the death of his wife, Liberato was allowed to relocate to the Mission San Jose region, where he met his second wife **Efrena Quennatole**. Efrena Quennatole who was **Napian/Karquin Ohlone** was born in 1797 and she was baptized at Mission San Jose on January 1, 1815 at the age of 18 years. Father Fortuny had married Liberato and Efrena (who by then was a widow) on July 13, 1818.

Liberato Culpecse and Efrena Quennatole had a son named Jose Liberato Dionisio (a.k.a. Liberato Nonessa). Liberato and Efrena later had a daughter named Maria Efrena in 1832. Both Jose Liberato Dionisio and Maria Efrena married other Mission San Jose Muwekma Indians. Liberato Dionisio's second wife was Maria de Jesus who was the daughter of *Capitan* Rupardo Leyo (Leopardo) and was the younger sister of *Capitan* Jose Antonio. Liberato Dionisio and Maria de Jesus had several children including Francisca Nonessa Guzman, born May 7, 1867.

Maria Efrena had married an Indian man named **Panfilo Yakilamne** (possibly from the **Ilamne** Tribe of the Sacramento Delta region) and they had several children including their youngest daughter **Avelina Cornates (Marine)**. During the late 19th and early 20th centuries, **Francisca Nonessa Guzman** and **Avelina Cornates Marine** became two the founding matriarchs of the present-day Guzman and Marine lineages. They, along with the other tribal families, comprised the historic **Federally Recognized Verona Band of Alameda County** tribal community residing at the following East Bay rancherias: San Lorenzo, Alisal (Pleasanton), Del Mocho (Livermore), El Molino (Niles), Sunol, and later Newark.

Avelina Cornates Marine was born in November 1863 and baptized at Mission San Jose on January 17, 1864. By the late 1880s she had met **Raphael Marine**. Avelina Cornates and Raphael Marine had nine living children by 1903, six of whom have surviving descendents who are presently enrolled in the Muwekma Tribe.

During the early 1940s the great-great-grandson of Liberato Culpecse (b. 1787) and Efrena Quennatole (b. 1797), via their daughter **Maria Efrena** (b. 1832), and her daughter **Avelina Cornates Marine** (b. 1863), through her daughter **Mercedes Marine Arellano** (b. 1895), to her son, **Albert Marine Arellano** (b. 1909 on the Alisal Rancheria) had built his house in **Russell City (Hayward)**. There the Arellanos grew up and raised their families there. Today, many of the Arellanos as well as other members of the Tribe reside within their ancestral **Jalquin** Ohlone territory thus demonstrating a continuous "occupation" of this area of the Tribe's ancestral homeland.

Another major lineage enrolled in the Muwekma Tribe is the **Armija/Thompson** lineage. Direct ancestors of the Armija/Thompson lineage have been traced back several generations to the **Seunen** Ohlone [**Chocheño**]-speaking Tribal group (Dublin/Livermore region) the "del estero" **Alson** Ohlone [**Chocheño**]-speaking Tribe (Fremont/Milpitas/north San Jose plain), **Chupcan** Bay Miwok-speaking Tribal group (centering around the **Mount Diablo** region and Clayton), and to the **Tamcan** North Valley Yokut-speaking Tribe (Byron region).

<u>By 1910</u> Belle Stokes (Armija) was living and working as a "Servant" for a private family on Central Avenue in the City of Alameda. Later Belle moved to back to Niles and married another Muwekma Indian man named Joe Nichols. Belle enrolled with the BIA in 1930 and identified her tribal affiliation as "**Olanian**" (Ohlone) to BIA Examiner Fred Baker.

The descendants of Magdalena Armija Marshall Thompson are enrolled in the Muwekma Tribe.

East Bay Rancherias

During the mid-19th Century Muwekma ancestors resided on several East Bay rancherias. One of these was located near Mount Diablo in Contra Costa County. On the 1852 census for Contra Costa County at the end of the census it notes "Rancheria of Indians – Monte Diablo" and on another portion of the census is a total enumeration of Indian Males – 156, Indian Females – 122." Later listed on the **1880 census** for Township #1 Contra Costa County was a Muwekma ancestral family of Augustine Peralta (Indians) who is all likelihood to the surname of Luis Maria Peralta. Also listed in Augustine's household was **Thomas Peralta** (Indian) [Page 28, District No. 2, and Enumeration Dist. No. 45]. Thomas Peralta had later married **Leona Guzman** (daughter of **Jose Guzman** and **Angustia Lasoyo** who in turn was the daughter of **Capitan Jose Antonio**). Thomas Peralta and Leona Guzman later had a daughter named **Catherine Peralta**. Catherine Peralta later married **Dario Marine** and their grandchildren are enrolled in the Muwekma Ohlone Tribe.

Another one of the other major historic rancherias was established in the San Leandro/San Lorenzo area. It was referred to as the **San Lorenzo Rancheria** (aka **the Springs**). Mission San Jose records document the fact that after the death of **Liberato Culpecse** (see above), his wife **Efrena Quennatole** had remarried and they lived on the San Lorenzo Rancheria. One of their children was a son named Ybon who was known as **Miguel Santos**.

On the **1880 Census, Miguel Santos** (age 40); Maria (Celsa), wife, age 35; Hosa S. (Jose Santiago), son, age 15; Maria (Antonia), daughter, age 7; Vincent (Jose Antonio), son, age 5; and Pappoose, son, age 5/12, (born January 1880), were residing in Brooklyn Township, north of the San Leandro Creek near the old San Lorenzo Rancheria, possibly near the old town of **Fitchburg** (now Oakland).

In the 1880s, the **Hearst** family purchased part of the old Bernal Rancho/Landgrant containing the **Alisal Rancheria** and Mrs. Phoebe Apperson Hearst permitted the 125 Muwekmas living at Alisal to remain on the land, and even employing some of them to do her laundry.

During the early part of the 20th century, the Muwekma Ohlone Indians (later identified as the Verona Band by the BIA) became **Federally Recognized** and appear on the Special Indian Census conducted by Agent C. E. Kelsey in 1905-1906

Concurrently, during this period of time, Mrs. Hearst was responsible for funding the fledgling Department of Anthropology at U.C. Berkeley. Dr. Alfred L. Kroeber, one of the early pioneering anthropologists, became known as "the Father of California Anthropology" interviewed some of the knowledgeable speakers of the Indian languages amongst the Mission San Jose Indians in the East Bay beginning in 1904.

Shattering the Myth that the Muwekma Ohlone were Never Federally Recognized

In 1989 The Muwekma Tribe sent a letter to the Branch of Acknowledgement and Research in order to have the tribe's Acknowledged status restored. After eight years in the petitioning process, and after the submittal of several thousand pages of historic and legal documentation, on May 24, 1996 the Bureau of Indian Affairs' Branch of Acknowledgment and Research (BAR) made a positive determination that:

Based upon the documentation provided, and the BIA's background study on Federal acknowledgment in California between 1887 and 1933, we have concluded on a preliminary basis that the Pleasanton or Verona Band of Alameda County was previous acknowledged between 1914 and 1927. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California. The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity.

On December 8, 1999, the Muwekma Tribal Council and its legal consultants filed a law suit against the Interior Department/BIA – naming Secretary Bruce Babbitt and AS-IA Kevin Gover over the fact the Muwekma as a previously Federally recognized tribe it should not have to wait 20 or more years to complete the reaffirmation process.

In 2000 – D.C. District Court Justice Ricardo Urbina wrote in his <u>Introduction of his</u> <u>Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order</u> (July 28, 2000) and <u>Memorandum Order Denying the Defendants' to Alter or Amend the Court's</u> <u>Orders</u> (June 11, 2002) that:

"The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States." (Civil Case No. 99-3261 RMU D.D.C.)

On October 30, 2000, response by the Department of Interior's Branch of Acknowledgment and Research/Tribal Services Division of the Bureau of Indian Affairs to Justice Urbina's Court Order regarding the Muwekma Ohlone Tribal enrollment and descendency from the previous Federally recognized tribe, BIA staff concluded:

".... When combined with the members who have both types of ancestors), **100% of the membership is represented**. Thus, analysis shows that the petition's membership can trace (and, based on a sampling, can document) its various lineages back to individuals *or* to one or more siblings of individuals appearing on the 1900, "Kelsey", and 1910 census enumerations described above."

On_July 25, 2002, Congresswoman Zoe Lofgren issued her "Extension of Remarks" on the floor of the House of Representatives stating:

"The Muwekma Ohlone Indian Tribe is a sovereign Indian Nation located within several counties in the San Francisco Bay Area since time immemorial.

In 1906, the Tribe was formally identified by the Special Indian Census conducted by Indian Agent C. E. Kelsey, as a result of the Congressional Appropriation Act mandate to identify and to purchase land for homeless California Indian tribes.

At this time, the Department of Interior and the Bureau of Indian Affairs federally acknowledged the Verona Band as coming under the jurisdiction of the Reno and Sacramento Agencies between 1906 and 1927.

The Congress of the United States also recognized the Verona Band pursuant to Chapter 14 of Title 25 of the United States Code, which was affirmed by the United States Court of Claims in the Case of Indians of California v. United States (1942) 98 Ct. Cl.583.

The Court of Claims case judgment instructed the identification of the Indians of California with the creation of Indian rolls. The direct ancestors of the present-day Muwekma Ohlone Tribe participated in and enrolled under the 1928 California Indian Jurisdictional Act and the ensuing Claims Settlement of 1944 with the Secretary of the Interior approving all of their enrollment applications.

Meanwhile, as a result of inconsistent federal policies of neglect toward the California Indians, the government breached the trust responsibility relationship with the Muwekma tribe and left the Tribe landless and without either services or benefits. As a result, the Tribe has suffered losses and displacement. Despite these hardships the Tribe has never relinquished their Indian tribal status and their status was never terminated.

In 1984, in an attempt to have the federal government acknowledge the status of the Tribe, the Muwekma Ohlone people formally organized a tribal council in conformance with the guidelines under the Indian Reorganization Act of 1934.

In 1989, the Muwekma Ohlone Tribal leadership submitted a resolution to the Bureau of Indian Affairs' Branch of Acknowledgment and Research with the intent to petition for Federal

acknowledgment. This application is known as Petition #111. This federal process is known to take many years to complete.

Simultaneously, in the 1980's and 1990's, the United States Congress recognized the federal government's neglect of the California Indians and directed a Commission to study the history and current status of the California Indians and to deliver a report with recommendations. In the late 1990's the Congressional mandated report – the California Advisory Report, recommended that the Muwekma Ohlone tribe be reaffirmed to its status as a federally recognized tribe along with five other Tribes, the Dunlap Band of Mono Indians, the Lower Lake Koi Tribe, the Tsnungwe Council, the Southern Sierra Miwuk Nation, and the Tolowa Nation.

On May 24, 1996, the Bureau of Indian Affairs pursuant to the regulatory process then issued a letter to the Muwekma Ohlone tribe concluding that the Tribe was indeed a Federally Recognized Tribe.

In an effort to reaffirm their status and compel a timely decision by the Department of the Interior, the Muwekma Ohlone Tribe sued the Bureau of Indian Affairs. The Court has mandated that the Department issue a decision this year. That decision is expected in early August.

Specifically, on July 28, 2000, and again on June 11, 2002, Judge Ricardo Urbina wrote in his Introduction of his <u>Memorandum Opinion Granting the Plaintiff's Motion to Amend the</u> <u>Court's Order</u> (July 28, 2000) and <u>Memorandum Order Denying the Defendants' to Alter</u> <u>or Amend the Court's Orders</u> (June 11, 2002) affirmatively stating that:

"The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States." (Civil Case No. 99-3261 RMU D.D.C.)

I proudly support the long struggle of the Muwekma Ohlone Tribe as they continue to seek justice and to finally, and without further delay, achieve their goal of their reaffirmation of their tribal status by the federal government. This process has dragged on long enough. I hope that the Bureau of Indian Affairs and the Department of Interior will do the right thing and act positively to grant the Muwekma Ohlone tribe their rights as a Federally Recognized Indian Tribe.

The Muwekma Ohlone Tribe has waited long enough; let them get on with their lives as they seek to improve the lives of the members of this proud tribe. To do anything else is to deny this tribe Justice. They have waited patiently and should not have to wait any longer." (Congresswoman Zoe Lofgren 2002)

On September 21, 2006, another victory was handed to the Muwekma Tribe by Judge Reginald Walton, U.S. District Court in Washington, D.C. stating:

"The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County ("the Verona Band"). ... From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. ... Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. ... "

In conclusion, although the Muwekma Tribe was not reaffirmed by a hostile Bureau of Indian Affairs in Washington, D.C., nonetheless, the tribe is continuing to exercise its sovereignty and authority as a Recognized Tribe. Therefore, once again thank you for contacting our Tribal office with regards the proposed projects and we would like for you to include in its educational program accurate and updated historic and legal information about our Tribe. In the past we have been troubled by the generic treatment about our history and heritage, which is usually fraught with myths, stereotypes and much outdated information usually cited from Malcolm Margolin's interpretive fantasy The Ohlone Way, and Levy's section "Costanoan" in the Handbook on North American Indians, Vol. 8. 1978.

Should you have any additional questions or would like to obtain primary documentation, please contact our tribal office and we shall comply with your request.

Sincerely,

Charlene Nijmeh, Chairwoman

Cc: Muwekma Tribal Council Cultural Resources file EBRPD proposed Coyote Hills Restoration and Public Access Project

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

MUWEKMA TRIBE,

v.

3

Plaintiff,

Civil Action No.:

99-3261 (RMU)

BRUCE BABBITT,, Secretary of the United States Department of the Interior, and

KEVIN GOVER, Assistant Secretary for Indian Affairs, United States Department of the Interior,

Defendants.

MEMORANDUM OPINION

Granting the Plaintiff's Motion to Amend the Court's Order

I. INTRODUCTION

The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOP") recognized the Muwekma Tribe as an Indian tribe under the jurisdiction of the United States. In more recent times, however, and despite its steadfast efforts, the Muwekma Tribe has been unable to obtain federal recognition, a status vital for the Tribe and its members. Without federal recognition, the Tribe cannot receive the benefits of health care, housing, economic development, and self-governance that the United States provides to federally recognized tribes. *See* Pl.'s Mot. for Summ. J. at 2; 25 C.F.R. § 83.2.

Document Nos.: 27, 28

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

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)

MUWEKMA OHLONE TRIBE, Plaintiff, v. DIRK KEMPTHORNE,¹ Secretary of the Interior, <u>et al</u>., Defendants.

Civil Action No. 03-1231(RBW)

MEMORANDUM OPINION

The Muwekma Ohlone Tribe ("Muwekma," "the Tribe," or "the plaintiff")² brings this action under the United States Constitution and the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 554, 701-706 (2000), seeking review of the "Final Determination Against Federal Acknowledgment of the Muwekma Ohlone Tribe" ("Final Determination"), 67 Fed. Reg. 58,631 (2002), issued by the Department of the Interior ("DOI" or "the Department"),³ which declined to

¹ Pursuant to Federal Rule of Civil Procedure 25(d)(1), the Court has substituted the Secretary of the Interior, Dirk Kempthorne, for the former Secretary, Gale Norton, as a defendant in this action.

² As a matter of convenience, and in accordance with both parties' pleadings, the Court will at times throughout this Opinion refer to the plaintiff as "the Tribe." See Complaint ¶ 1; Answer at 2 n.2. The Court notes, however, that the plaintiff's status as a Native American tribe within the meaning of the federal acknowledgment criteria is the primary point of contention in this litigation. See Morton v. Mancari, 417 U.S. 535, 553 & n.24 (1974) (stating that for the purposes of federal recognition tribal status is a political rather than racial classification). Accordingly, the Court's reference to the plaintiff as "the Tribe" is not intended to suggest that the plaintiff is, or should be, entitled to federal tribal recognition.

³ The named defendants are (1) Gale Norton, in her official capacity as the Secretary of the Interior ("Secretary"); (2) Aurene Martin, in her capacity as the Acting Assistant Secretary for Indian Affairs; and (3) the Department of the Interior (collectively "the defendants"). As noted <u>supra</u>, Dirk Kempthorne has been substituted for Gale Norton pursuant to Rule 25(d)(1). In addition, Aurene Martin is no longer the Acting Assistant Secretary for Indian Affairs, and the position is currently vacant.

grant federal recognition to Muwekma as a Native American tribe pursuant to the acknowledgment criteria of 25 C.F.R. § 83 (2006) ("Part 83"). Complaint ("Compl:") ¶ 1. Specifically, Muwekma contends, <u>inter alia</u>, that the Department violated the Equal Protection Clause and the APA by requiring it to undergo the Part 83 acknowledgment procedures while allowing similarly situated tribal petitioners to bypass these procedures altogether. Compl. ¶¶ 37-39; Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem.") at 22-30. Currently before the Court are the parties' cross-motions for summary judgment.⁴ For the reasons set forth below, the Court denies both parties' motions without prejudice and directs the Department to supplement the administrative record.

I. Background

The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County ("the Verona Band"). Pl.'s Mem. at 4; Defs.' Mem. at 5; Answer at 6. From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. Pl.'s Mem. at 4-5; Defs.' Mem. at 5; Answer at 12-13. Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. Pl.'s Mem. at 5; Answer at 14.

⁴ The following papers have been submitted in connection with these motions: (1) Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem."); (2) Memorandum in Support of Defendants' Cross-Motion for Summary Judgment and Response in Opposition to Plaintiffs' Motion for Summary Judgment ("Defs.' Mem."); (3) Reply Brief in Support of Plaintiff's Motion for Summary Judgment and Opposing Defendants' Motion for Summary Judgment ("Pl.'s Opp."); (4) Reply Memorandum in Support of Defendants' Cross-Motion for Summary Judgment ("Defs.' Reply"); (5) Plaintiff's Notice of Supplemental Authority ("Pl.'s Not."); (6) Defendants' Response to Plaintiff's Filing of Supplemental Authority ("Defs.' Resp."); (7) Plaintiff's Second Notice of Supplemental Authority ("Pl.'s Second Not."); (8) Defendants' Response to Plaintiff's Second Notice of Supplemental Authority ("Defs.' Second Resp."); and (9) Plaintiff's Reply in Support of Second Notice of Supplemental Authority ("Pl.'s Reply to Second Resp.").

DEPARTMENT OF THE INTERIOR OFFICE OF INDIAN AFFAIRS

Application Number .10298 ...

Name

Marine, Lucas

Application Number

10298

Action taken

Approved, FAB

-

Application for enrollment with the Indians of the State of California under the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

.....

Sir:

ok

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	<u>Ages</u> <u>in 1928</u>	Sex	Dates of Birth Month Day Year	<u>Degree of</u> <u>Indian Blood</u>
Marine, Lucas	Head	38	M	10-18-1900	1/2
", <u>Ernest</u>	Son	2	<u>M</u>	1-26-1926	3/4
Note:* See appli	cetion of Vet	ie Monine	·····	fa Contonvill	a Alamada
	County, Califo			and the second	e, Alameda
				r	
	Box 6.	Centervi]	le,	AlamadaCounty	".California
3. Post Office	Town or City,			Alameda County	California. State
Note:* Does not	Rural Route Nu live on Trust	Lands.			
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	minor children .	,
			, Cal	lifornia. My cl	hild was born
in Alameda Count	y, Jalifornia	•			

-1-

			ocino Countie		18
6. A	are you married?	Yes.			
7. I	f a married woman, giv	ve your name b 	efore you were i	married	
8. N	ame and exact date of		Day, and Year) Peralta A		
	s he (or she) of India egree of Indian blood	n blood? If	ALC: ALC: NO. 1	9 7 7 79.8	1110.0.00
	Yes 4/4	Ohlone	s, (Tribal	name unkno	. III (III
		Alamed	la County, Ca	lifornia.	
	What is your degree of State of California d			ibe or Band ones (?) Tri	
	1/2		Unknown, A	lameda Cour	ty, Californ
	Degree of Indian Blo	bđ	Name	of Tribe or	Band
		I do not	know.		
	Give the names of you through whom you clain United States. If you date, set forth each or ancestors setting	n, who were pa 1 claim throug claim separate	rties to any T h more than on ly. State your	reaty or Trea e ancestor 1 descent from	ties with the iving on that
	Names	Trib	e or Band	Relation	ship by Blood
Evε	alina L'arine	Ohlones,	Tribal name	unknown,	Mother.
		Alameda	County, Cali:	fornia.	
	(See Nos 15	and 26)		
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	م ت الى	194 T	-2- 1-14		11
	*				

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IN REPLY REFER TO:

United States Department of the Interior



BUREAU OF INDIAN AFFAIRS Washington, D.C. 20240

Tribal Government Services - AR

MAY 2 4 1996

Ms. Rosemary Cambra 226 Airport Parkway, Suite 630 San Jose, California 95110

Dear Ms. Cambra:

The Branch of Acknowledgment and Research has reviewed documentation submitted by the Muwekma to demonstrate previous acknowledgment. The purpose of this research is to determine whether the Muwekma can utilize section 83.8 of the acknowledgment regulations by demonstrating previous Federal acknowledgment in the 20th century.

If a petitioner can demonstrate past acknowledgment, the requirements to be acknowledged are reduced, in accord with section 83.8(d). A previously acknowledged petitioner need only demonstrate tribal existence from the point of last Federal acknowledgment. Further, the demonstration of tribal existence between last acknowledgment and the present-day community requires only a demonstration of criterion 83.7(c), using a reduced burden of evidence. The petitioner must still show that modern-day group meets the full requirements of criteria 83.7(b) and (c). Tribal ancestry under criterion 83.7(e) must still be shown, tracing from the group at the point of last Federal acknowledgment or earlier.

A determination of previous acknowledgment has two general elements. One is to show a past Federal action which constitutes unambiguous Federal acknowledgment. The second is to establish on a preliminary basis that the present group is the same as or has evolved from the group as it existed at the point of last acknowledgment.

Based on the documentation provided, and the BIA's background study on Federal acknowledgment in California between 1887 and 1933, we have concluded on a preliminary basis that the Pleasanton or Verona Band of Alameda County was previously acknowledged between 1914 and 1927. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California. The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity. The band was among the bands proposed by a Special California Indian agent in 1914 for homesite land under the appropriations for homeless California Indians which began in 1906. In 1928, the band was again identified under the land purchase program, but this review was that a homesite was not required.

The Muwekma have also established, on a preliminary basis, that it is the same group as the band identified between 1914 and 1927. Consequently, the Muwekma may complete their petition documentation based on section 83.8 of the regulations, tracing the group's existence from 1927 to the present.

This letter is a determination of eligibility to be evaluated under section 83.8, not a determination that the Muwekma meet the requirements of the acknowledgment regulations, section 83.7, as modified for previously acknowledged groups by section 83.8. That determination will be made during the active consideration of the Muwekma petition.

While we have endeavored to make this determination as conclusive as possible, you should be aware that a determination of the point of last Federal acknowledgment under 83.8 is subject to review during the preparation of the proposed finding, as well as to challenge and review in the final determination comment process and any reconsideration, in the same manner as any other question bearing on a determination concerning acknowledgment.

This letter constitutes only a portion of the results of the technical assistance review of the documented Muwekma petition. The technical assistance review will be conducted based on the this determination of previous acknowledgment. We expect to provide the balance of the review within a short time.

Sincerely,

SGD/ DEBORAH J. MADDOX

Director, Office of Tribal Services

cc: Al Logan Slagle Dena Magdaleno

Surname; 440B; 440 Chron; 400; Hold; Roth:gr; x3592; 5/6/96; muwekprv.ltr; transmit 7; ret:jac 05-10-96



IN REPLY KEYER TO:

Ms. Dena Magdaleno Post Office Box 56 Burnt Ranch, CA 95527

Dear Ms. Magdeleno:

This is to acknowledge receipt of your letter dated December 16, 1997 and received in this office on December 22, 1997. Please accept our apologies for the delay in responding.

BUREAU OF INDIAN AFFAIRS

At your request, I am writing a letter of support for the Tsnungwe Council and the Muwekma Ohlone Tribe in their bid for Federal recognition. First let me state that the Bureau of Indian Affairs. Sacramento Area Office, is painfully conscious of the fact that California Indian tribes and their individual members have suffered numerous atrocities and inequities from the dominant culture through the hands of the United States Government and the State of California. To this day, those tribes who are fortunate to have Federal recognition status continue to suffer inequities in their share of Federal funds compared to funds received by similar tribes in other states. To that end, this office fully supports efforts by Indian groups such as the Tsnungwe Council and the Muwekma Ohlone Tribe in their bids for Federal recognition status.

Along with your request regarding the Tsnungwe Council, you provided a letter signed by the Acting Director, Office of Tribal Services, which acknowledged that you had established evidence that your ancestors were considered as parties to the 1864 Treaty. We concur with the Central Office of this finding and will support your bid for Federal recognition. I believe the Assistant Secretary - Indian Affairs has the administrative authority to reaffirm Federal status to your tribe.

Although the Central Office has noted that the 1851 Treaty did not provide conclusive evidence that the treaty did not establish clear evidence of Federal recognition of your ancestors, I am fully supportive of your efforts to establish "unambiguous" Federal recognition of your ancestoral group as a tribal entity.

The Bureau of Indian Affairs, Sacramento Area Office, is ready to assist the Tsnungwe Council and the Muwekma Ohlone Tribe in seeking administrative Federal recognition on the basis your tribes were never terminated.

Sincerely,

Area Director

United States Department of the Interior



Sacramento Area Office 2800 Cottage Way Sacramento, California 95825

JAN 2 3 1998

.07/30/2002 08:58 FAX 2022263338

Rep. Zoe Lofgren

Extension of Remarks Representative Zee Loigren July 25, 2002

The Muwekina Ohlone Indian Tribe is a sovereign Indian Nation located within several counties in the San Francisco Bay Area since time immemorial.

In 1906, the Tribe was formally identified by the Special Indian Census conducted by Indian Agent C.E. Kabey, as a result of the Congressional Appropriation Act mandate to identify and to purchase land for the landless and homeless California Indian tribes.

At this time, the Department of Interior and the Bureau of Indian Affairs federally acknowledged the Verona Band as coming under the jurisdiction of the Reno and Sacramento Agencies between 1906 and 1927.

The Congress of the United States also recognized the Verona Band pursuant to Chapter 14 of Title 25 of the United States Code, which was affirmed by the United States Court of Claims in the Case of Indians of California v. United States (1942) 98 Ct. Cl.583.

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Advisory Report, recommended that the Muwekma Ohlone Tribe be reaffirmed to its status as a federally recognized tribe along with five other Tribes, the Dunlap Band of Mono Indians, the Lower Lake Koi Tribe, the Tanungwe Council, the Southern Sierra Miwuk Nation, and the Tolowa Nation.

On May 24, 1996, the Bureau of Indian Affairs pursuant to the regulatory process then issued a letter to the Muwekma Ohlone Tribe concluding that the Tribe was indeed a Federally Recognized Tribe.

In an effort to reaffirm their status and compel a timely decision by the Department of the interior, the Muwskma Ohlone Tribe sued the Bureau of Indian Affairs. The Court has mandated that the Department issue a decision this year. That decision is expected in early August.

Specifically, on July 28, 2000, and again on June 11, 2002, Judge Ricardo Urbina wrote in his Introduction of his <u>Memorandum Opinion Granting the Plaintiff's</u> <u>Motion to Amend the Court's Order (July 28, 2002) and Memorandum Order Denying</u> the Defendant's to Alter or Amend the Court's Orders (June 11, 2002) affirmatively stating that:

"The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Cantury, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States." (Civil Case No. 99-32671 RMU D.D.C.)

I proudly support the long struggle of the Mnwekma Ohlene Tribe as they continue to seek justice and to finally, and without finther delay, achieve their goal of their reaffirmation of their tribal status by the federal government. This process has dragged on long enough. I hope that the Bureau of Indian Affairs and the Department of Interior will do the right thing and act positively to grant the Muwekma Ohlene Tribe their rights as a Federally Recognized Indian Tribe. The Muwekma Ohlene Tribe has waited long enough; let them get on with their lives as they seek to improve the lives of the members of this proud tribe. To do anything else is to deny this Tribe Justice. They have waited patiently and should not have to wait any longer.



ERUZ M. BUSTAMANTE Lieutenant Governor State of California

August 29, 2002

The Honorable Neal McCaleb Assistant Secretary-Indian Affairs United States Department of the Interior 1849 C Street, N.W. Washington, D.C. 20240

Dear Secretary McCaleb:

I write to urge you to support Petition #111 by the Muwekma Ohlone Tribe for reaffirmation of Federal Acknowledgement.

The Muwekma Ohlone Tribe meets all of the criteria for reaffirmation set by the court as well as the Bureau of Indian Affairs' acknowledgement criteria. The tribe is a previously recognized tribe. It has demonstrated that it has had a trust relationship with the United States from 1906 to the present and Congress has never terminated their relationship.

The tribe's members descend from an historical Indian tribe and they are not members of any other Federally-recognized tribe.

After compiling data and completing extensive research, the Muwekmas have presented a compelling case for the tribe's Federal Acknowledgement. I respectfully urge you and the Bureau of Indian Affairs to carefully review their Petition.

Sincerely,

stamente

CRUZ M. BUSTAMANTE Lieutenant Governor

cc: The Honorable Aurene Martin, Deputy Assistant Secretary-Indian Affairs

CMB:BM/mb082902

26

From:	Charlene Nijmeh <c_nijmeh@yahoo.com></c_nijmeh@yahoo.com>
Sent:	Sunday, May 20, 2018 4:28 PM
То:	Karla Cuero
Cc:	Alan Leventhal; Monica V. Arellano; Rosemary Cambra; Norma Sanchez; Rosemary
	Cambra
Subject:	EBRPD Coyote Hills Restoration and Public Access Project
Attachments:	EBRPD Coyote Hills Restoration Project EIR Response.docx; Previous Recognition
	5-24-96-1.pdf; BIA Smith Letter 1998.pdf; DC District Court Muwekma.pdf; Federal Court
	Opinion Muwekma.pdf; Lofgren Extension of Remarks.pdf; Lt. Governor Letter 2002.pdf;
	Muwekma Elder Lucas Marine 1928 BIA.pdf
Follow Up Flag:	Follow up
Flag Status:	Flagged

Hello Karla

As Chairwoman of the Muwekma Ohlone Tribe I am reaching out to thank you for notifying the Tribal leadership about the proposed Coyote Hills Restoration and Public Access Project on East Bay Regional Park District Lands adjacent to Coyote Hills in Alameda County. Please let me know if any coordination is needed on our part. Please see attached documents for you review.

Thank you again.

Charlene Nijmeh Chairwoman MUWEKMA OHLONE TRIBE OF THE SF BAY AREA

From:	JONATHAN BIGGS
To:	Karla Cuero
Cc:	<u>kwallace@fremont.k12.ca.us; jchwastyk@fremont.k12.ca.us; clemos@fremont.k12.ca.us</u>
Subject:	Coyote Hills EIR May 31, 2018 scoping session. Per CBE Regulations: No Schools should be built on Land Subject to Liquefaction
Date:	Thursday, May 31, 2018 10:45:43 AM

May 31, 2018

To: Karla Cuero, East Bay Regional Parks District, 2950 Peralta Oaks Court, Oakland, CA 94605, 510-544-2622

Kcuero@ebparks.org

RE: Coyote Hills Regional Park EIR Scoping Session, May 31, 2018, 6:30 PM, at the East Bay Regional Park District's Board Room, 2950 Peralta Oaks Court, Oakland, CA 94605

Copy: Dr. Kim Wallace, Superintendent, Fremont Unified School District, <u>KWallace@fremont.k12.ca.us</u>, 510-659-2597

John Chwastyk, Director of Facilities and Construction, FUSD, JChwastyk@fremont.k12.ca.us , 510-659-2559 X 12-445

Carol Lemos, Secretary of Facilities and Construction, FUSD, <u>CLemos@fremont.k12.ca.us</u> , 510-659-2559 X 12-443

Dear Ms. Cuero,

As East Bay Regional Parks proceeds with the Coyote Hills - Restoration and Access Site Plan projects and EIR process, please take note of the following regulation set forth by the California Board of Education, with regards to selection of sites for California Public Schools

https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

Title 5, California Code of Regulations

Division 1, Chapter 13, Subchapter 1

School Facilities Construction

Article 2. School Sites

- 14010. Standards for School Site Selection.
- "i. The site is not subject to moderate to high liquefaction or landslides."

The school site location shown on the <u>Coyote Hills - Restoration and Access Site</u> <u>Plan_Attachment 3.pdf</u>, is land subject to **moderate** liquefaction per USGS Maps. <u>So</u> <u>therefore no public school should be built at the proposed school site location.</u>

https://geomaps.wr.usgs.gov/sfgeo/liquefaction/susceptibility.html

Please notify and include representatives from the Fremont Unified School District in the EIR process.

Thank you for your consideration in this matter.

Mary Biggs

Fremont Homeowner and FUSD Parent

J.Biggs@comcast.net

510-299-5171 cell

Attachment(s) | View attachments on the web

2 of 2 File(s)
Coyote Hills - Restoration and Access Site Plan_Attachment 3.pdf
NOP - with attachments.pdf

VISIT YOUR GROUP

Coyote Hills Restoration and Public Access Project

Public Scoping Meeting May 31, 2018 for EIR

Summary of Oral Comments:

- Consider alternatives to the preferred conceptual plan, including different placement of trails, parking area located south of Patterson Ranch Road
- Be transparent about possibility that "human remains" may be disturbed by project
- Consider improving the exhibit on Native Americans in the Coyote Hills Visitor Center as a mitigation measure
- Need to evaluate impacts of project trails on habitat fragmentation
- Need access on project site for mosquito abatement; consider access routes and vegetation management



COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT CEQA -- NOP Meeting 5-31-2018- Comment Card

Please write your comments regarding topical areas that should be addressed in the CEQA document below: Be specific when possible (i.e. address potential trail impacts on endangered species)

SAUYCAL especially tuman peer Anari 2007 as as aun 9705 -14 MITIGATION) provide tunding Doin ne thans dian exhibits Chia Uparas in could he provided **Optional:** HNDREL Name: Email or Phone: chochen

Please note that comments and information submitted become part of the public record. Please turn in this card to a team member at the end of the meeting, or if turning in after the meeting, please mail to: Karla Cuero, Project Coordinator 2950 Peralta Oaks Ct. Oakland, CA 94605 or email: <u>kcuero@ebparks.org</u>. Last day to submit a comment is June 18, 2018 Thank you for participating in the Coyote Hills Restoration and Public Access planning process!

From:	Carin High <howardhigh1@comcast.net></howardhigh1@comcast.net>
Sent:	Thursday, May 31, 2018 10:55 AM
To:	JONATHAN BIGGS
Cc:	Karla Cuero;
Subject:	Re: Coyote Hills EIR May 31, 2018 scoping session. Per CBE Regulations: No Schools should be built on Land Subject to Liquefaction
Follow Up Flag:	Follow up
Flag Status:	Flagged

Hi Mary,

The issue of the school site and City of Fremont park site are not part of the EIR and not the responsibility of EBRPD. They have no control over those issues. The parking lot proposed is not immediately adjacent to Patterson Slough, but certainly the info you provided could have pertinence for wildlife and surrounding habitat.

Thanks! Carin

Sent from my iPhone

On May 31, 2018, at 10:45 AM, JONATHAN BIGGS < i.biggs@comcast.net > wrote:

May 31, 2018

To: Karla Cuero, East Bay Regional Parks District, 2950 Peralta Oaks Court, Oakland, CA 94605, 510-544-2622

Kcuero@ebparks.org

RE: Coyote Hills Regional Park EIR Scoping Session, May 31, 2018, 6:30 PM, at the East Bay Regional Park District's Board Room, 2950 Peralta Oaks Court, Oakland, CA 94605

Copy: Dr. Kim Wallace, Superintendent, Fremont Unified School District, <u>KWallace@fremont.k12.ca.us</u>, 510-659-2597

John Chwastyk, Director of Facilities and Construction, FUSD, JChwastyk@fremont.k12.ca.us , 510-659-2559 X 12-445

Carol Lemos, Secretary of Facilities and Construction, FUSD, <u>CLemos@fremont.k12.ca.us</u> , 510-659-2559 X 12-443 Dear Ms. Cuero,

As East Bay Regional Parks proceeds with the Coyote Hills - Restoration and Access Site Plan projects and EIR process, please take note of the following regulation set forth by the California Board of Education, with regards to selection of sites for California Public Schools

https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

Title 5, California Code of Regulations

Division 1, Chapter 13, Subchapter 1

School Facilities Construction

Article 2. School Sites

14010. Standards for School Site Selection.

"i. The site is not subject to moderate to high liquefaction or landslides."

The school site location shown on the <u>Coyote Hills - Restoration and Access Site Plan Attachment 3.pdf</u>, is land subject to moderate liquefaction per USGS Maps. <u>So therefore no public school should be built</u> at the proposed school site location.

https://geomaps.wr.usgs.gov/sfgeo/liquefaction/susceptibility.html

Please notify and include representatives from the Fremont Unified School District in the EIR process.

Thank you for your consideration in this matter.

Mary Biggs

Fremont Homeowner and FUSD Parent

510-299-5171 cell

Attachment(s) View attachments on the web	
2 of 2 File(s)	
Coyote Hills - Restoration and Access Site Plan_Attachment 3.pdf	
NOP - with attachments.pdf	

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COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT CEQA – NOP Meeting 5-31-2018- Comment Card

Please write your comments regarding topical areas that should be addressed in the CEQA document below: Be specific when possible (i.e. address potential trail impacts on endangered species)

Masquito Abatement -1 EQUIDMP 10. of Lower PVA. emput non Willow as reas

Optional: oseph Huston Name: ~ Email or Phone: Josepha Mosquitoes. Org 510 783-7744

Please note that comments and information submitted become part of the public record. Please turn in this card to a team member at the end of the meeting, or if turning in after the meeting, please mail to: Karla Cuero, Project Coordinator 2950 Peralta Oaks Ct. Oakland, CA 94605 or email: <u>kcuero@ebparks.org</u>. Last day to submit a comment is June 18, 2018

Thank you for participating in the Coyote Hills Restoration and Public Access planning process!

From:	Underwood, Jared <jared_underwood@fws.gov></jared_underwood@fws.gov>
Sent:	Friday, June 08, 2018 4:05 PM
To:	Karla Cuero
Subject:	Re: [EXTERNAL] Notice of Preparation and Scoping Session - Coyote Hills Restoration and Public Access Project

Hi Karla,

Thanks for including your neighbor in the process. We look forward to reviewing the documents.

Thanks,

Jared

Jared Underwood, Ph.D. Refuge Manager Don Edwards San Francisco Bay National Wildlife Refuge 1 Marshlands Road Fremont CA 94555 office (510) 792-0222 Ext 125 cell (510) 453-6695

On Tue, May 15, 2018 at 3:12 PM, Karla Cuero <<u>kcuero@ebparks.org</u>> wrote:

Hello – attached please find the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Coyote Hills Restoration and Public Access Project.

The scoping session will be held on Thursday, May 31, 2018 at 6:30PM at the District's Board Room – 2950 Peralta Oaks Ct., Oakland, CA 94605.

Thanks so much,

Karla



Karla Cuero Project Coordinator | Environmental Programs East Bay Regional Park District 2950 Peralta Oaks Court, Oakland, CA 94605 T: 510-544-2622 kcuero@ebparks.org | www.ebparks.org

From:C/H High <howardhigh1@comcast.net>Sent:Friday, June 15, 2018 3:26 PMTo:Chris Barton; Karla CueroSubject:Fwd: Coyote Hills Restoration PlanFollow Up Flag:Follow up

Flagged

Hi Chris,

Flag Status:

I don't know if Karla is in the office and scoping comments are due Monday, June 18th. I would like answers to my questions below to help inform the scoping comments we submit. So if you cannot answer the questions, would it be possible to obtain an extension until I can receive the answers?

In addition to the comments below, I forgot to ask if there were any conditions that went with the land when the land was donated to EBRPD regarding continuation of agriculture? For example, is there a specified acreage or location? We are not opposed to agriculture in the area and have supported it, I just want to fully understand the constraints that run with the land.

I would be extremely grateful for any information you can provide.

Regards,

Carin High

CCCR/OAS/FCHF

------ Forwarded Message ------Subject:Coyote Hills Restoration Plan Date:Thu, 14 Jun 2018 15:58:27 -0700 From:C/H High <u><howardhigh1@comcast.net></u> To:Karla Cuero <u><kcuero@ebparks.org></u>

Hi Karla,

I hope you are well!

I am writing to see if you have information that can help with scoping comments. Based upon very rough measurements, looking at the scale provided on the preferred concept plan, it appears the proposed parking lot is roughly an acre and a half in size. Is this correct?

Also, where can I find more information on the proposed picnic area - size, number of picnic facilities (e.g. tables, etc.) are there going to be BBQ pits?

It's also difficult to tell from the mapping provided - how far are the

parking lot and picnic facilities from Patterson Slough?

Any information you can provide would be greatly appreciated!

Thanks,

Carin High CCCR/OAS

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CCCR/OAS/FCHF

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Carin High CCCR/OAS



Daniel Woldesenbet, Ph.D., P.E., Director

399 Elmhurst Street • Hayward, CA 94544 • (510) 670-5480 • www.acgov.org/pwa

June 15, 2018

MS Karla Cuero East Bay Regional Park District 2950 Peralta Court Oakland Ca 94601 <u>kcuero@ebparks.org</u>

RE: Notice of Preparation (NOP) EIR - Coyote Hills Restoration and Public access Project

Dear Ms. Cuero,

The Alameda Flood Control and Water Conservation District (District) reviewed the NOP of proposed restoration of a 306-acre parcel west of Paseo Padre Boulevard, easterly and contiguous to the Coyote Hill Park in the City of Fremont, California.

The southerly portions of the 306-acre property includes a 58-acre parcel. This parcel to the south and contiguous to the Line P channel is designated as mitigation site for District maintenance activity impacts under a settlement agreement that culminated in District improving the Line P (Ardenwood Creek) from Tupelo Road upstream to about 2,600-feet downstream of Paseo Padre Parkway.

During the public meeting on May 31, 2018, it was discussed that several pedestrian crossings of District flood control channels involving installation of bridges are proposed.

The District recommends the following be evaluated in the EIR:

- Discussion of the 58-acre mitigation site;
- Discussion of the proposed bridge crossing locations and potential effects on maintenance access of the channels; and
- District future improvements along the Line P channel downstream of the recent restoration project and adjacent District properties.

Thank you for the opportunity to comment on the NOP. Please include the District in your circulation of the draft EIR. If you have any question, please contact me.

Yours truly,

Kwablah Attiogbe Supervisor Environmental Services.

From: Sent: To: Subject: C/H High <howardhigh1@comcast.net> Monday, June 18, 2018 1:48 PM Karla Cuero Re: Coyote Hills Restoration Plan

Hi Karla,

Thank you, I do intend to submit comments today. It just might not be by 5 pm as I am waiting for a couple of signatures and I have something that came up unexpectedly requiring me to step out for a few hours. Thank you however for the possibility of a few extra days.

Regards,

Carin

On 6/18/2018 1:33 PM, Karla Cuero wrote:

Hi Carin – I hope you had a great weekend!

We will make sure to cover the questions you had in our analysis for the EIR. Hopefully those questions will be addressed in the document, but please also feel free to comment during the 45-day EIR comment period.

As for this scoping period, we will certainly include the questions you had as part of your comments (if you'd like), and if you have any additional questions or comments, we will accept them over the next couple of days.

Thanks so much Carin.

-Karla



Karla Cuero Project Coordinator | Environmental Programs East Bay Regional Park District 2950 Peralta Oaks Court, Oakland, CA 94605 T: 510-544-2622 kcuero@ebparks.org | www.ebparks.org

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Please consider the environment before you print

From: C/H High [mailto:howardhigh1@comcast.net] Sent: Friday, June 15, 2018 4:04 PM To: Karla Cuero kcuero@ebparks.org; Chris Barton cuercommons.org; Chris Barton cuercommons.org; Chris Barton ; Chris Barton cuercommons.org; Chris Barton ; Chris Barton www.cuercommons.org; Chris Barton <a href="h

Thanks Karla,

Have a wonderful weekend.

Carin

On 6/15/2018 3:32 PM, Karla Cuero wrote:

Hi Carin – I meant to email you earlier today. We were planning to address the questions you had in the Project Description.

Chris is out today, but I will check Monday morning if we can do an extension. Thanks so much Carin.



Karla Cuero Project Coordinator | Environmental Programs East Bay Regional Park District 2950 Peralta Oaks Court, Oakland, CA 94605 T: 510-544-2622 kcuero@ebparks.org | www.ebparks.org

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Please consider the environment before you print

From: C/H High [mailto:howardhigh1@comcast.net] Sent: Friday, June 15, 2018 3:26 PM To: Chris Barton <cbarton@ebparks.org>; Karla Cuero <kcuero@ebparks.org> Subject: Fwd: Coyote Hills Restoration Plan

Hi Chris,

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Regards,

Carin High

CCCR/OAS/FCHF

----- Forwarded Message ------

Subject:Coyote Hills Restoration Plan Date:Thu, 14 Jun 2018 15:58:27 -0700 From:C/H High https://www.sciencest.net To:Karla Cuero kciencest.net

Hi Karla,

I hope you are well!

I am writing to see if you have information that can help with scoping comments. Based upon very rough measurements, looking at the scale provided on the preferred concept plan, it appears the proposed parking lot is roughly an acre and a half in size. Is this correct?

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It's also difficult to tell from the mapping provided - how far are the parking lot and picnic facilities from Patterson Slough?

Any information you can provide would be greatly appreciated!

Thanks,

Carin High CCCR/OAS



From:	Michelle Myers <michelle.myers@acwd.com></michelle.myers@acwd.com>
Sent:	Monday, June 18, 2018 3:22 PM
To:	Karla Cuero
Subject:	ACWD Comments - Notice of Preparation of an Environmental Impact Report for the
	Coyote Hills Restoration and Public Access Project
Attachments:	Coyote Hills Restoration and Public Access NOP EIR ACWD Comments 06-18-2pdf

Dear Ms. Cuero,

Thank you for the opportunity to comment on the subject Project. Attached is a PDF of ACWD's comment letter, which will go in the mail to you today. If you have any questions, please contact me at the number below.

Thank you,

Michelle A. Myers Groundwater Resources Manager

Alameda County Water District 43885 South Grimmer Boulevard Fremont, CA 94538

Phone: (510) 668-4454 Fax: (510) 651-1760 E-mail: michelle.myers@acwd.com





43885 SOUTH GRIMMER BOULEVARD • FREMONT, CALIFORNIA 94538

(510) 668-4200 • FAX (510) 770-1793 • www.acwd.org

DIRECTORS

AZIZ AKBARI JAMES G. GUNTHER JUDY C. HUANG PAUL SETHY JOHN H. WEED

June 18, 2018

Karla Cuero Environmental Programs Project Coordinator East Bay Regional Park District 2950 Peralta Oaks Court Oakland, CA 94605

Dear Ms. Cuero:

Subject: Notice of Preparation of an Environmental Impact Report for the Coyote Hills Restoration and Public Access Project

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Notice of Preparation of an Environmental Impact Report (EIR) for the Coyote Hills Restoration and Public Access Project (Project).

ACWD has reviewed the Notice of Preparation and would appreciate your consideration of the following comments while developing the EIR:

- <u>Groundwater</u>: A major portion of ACWD's water supply is obtained from the Niles Cone Groundwater Basin that approximately coincides with ACWD's boundaries and extends west under the San Francisco Bay. Therefore, it is imperative that ACWD protects the water quality and ensures the continued use of the groundwater basin for water supply for ACWD's customers.
 - a. <u>Groundwater Well Protection/Destruction</u>: In order to protect the groundwater basin, ACWD regulates the construction, repair, and destruction of wells, exploratory holes, and other excavations located within the City of Fremont under ACWD Ordinance No. 2010-01. Therefore, each well located within the Project area must be either protected or properly destroyed prior to construction activities. If the wells are to remain, a letter so indicating must be sent to ACWD. If a well is damaged or the surface seal is jeopardized in any way during construction activities, the wells must be destroyed in compliance with ACWD Ordinance No. 2010-01.

ACWD records indicate the existence of at least eight (8) abandoned wells located within the Project area. Any abandoned wells located within the Project area (including areas designated as open space) must be properly destroyed prior to grading and/or construction activities. Since most of the wells have not been located, ACWD requests that the EIR include the provision that Project proponents coordinate with ACWD so that: a) ACWD can assist in identifying abandoned wells, and b) any wells identified or discovered during construction are properly destroyed in accordance to ACWD specifications.



ROBERT SHAVER General Manager

STEVEN D. INN Water Resources STEVE PETERSON Operations and Maintenance ED STEVENSON Engineering and Technology Services JONATHAN WUNDERLICH Finance



- b. <u>Drilling Permit Requirement</u>: As required by ACWD's Well Ordinance No. 2010-01, drilling permits are required prior to the start of any subsurface drilling activities for wells, exploratory holes, and other excavations (including the installation of piles or piers for bridges that interconnect aquifers or water-bearing zones). Application for a permit may be obtained from ACWD's Engineering Department, at 43885 South Grimmer Boulevard, Fremont or online at http://www.acwd.org. Before a permit is issued, the applicant is required to deposit with ACWD, cash or check in a sufficient sum to cover the fee for issuance of the permit or charges for field investigation and inspection. All permitted work requires scheduling for inspection; therefore, all drilling activities must be coordinated with ACWD prior to the start of any field work.
- Access to ACWD Facilities: ACWD currently uses the Alameda County Regional Trail and Patterson Ranch Road to access a number of our facilities, including monitoring wells located west of the Project area. The information collected from the monitoring wells is used in the management of ACWD's groundwater resources; therefore, ACWD requests that the EIR address maintaining access to ACWD's facilities.
- 3. <u>ACWD Contacts</u>: The following ACWD contacts are provided so that the East Bay Regional Park District can coordinate with ACWD as needed during the CEQA process:
 - Michelle Myers, Groundwater Resources Manager, at (510) 668-4454 or by email at michelle.myers@acwd.com, for coordination regarding ACWD's groundwater resources.
 - Kit Soo, Well Ordinance Supervisor, at (510) 668-4455 or by email at kit.soo@acwd.com, for coordination regarding groundwater wells and drilling permits.
 - Juni Rotter, Development Services Supervisor, at (510) 668-4472 or by email at juniet.rotter@acwd.com, for coordination regarding public water systems and water services.

Thank you for the opportunity to comment on the Project at this time.

Sincerely,

Michelle A Myes for Steven D. Inn

Manager of Water Resources

mam/mh By email

cc: Michelle Myers, ACWD Kit Soo, ACWD Juni Rotter, ACWD

From:	CCCR
То:	Karla Cuero
Subject:	Scoping comments regarding the proposed Coyote Hill Regional Park Restoration and Public Access Plan
Date:	Monday, June 18, 2018 4:36:10 PM
Attachments:	Group scoping comments re Coyote Hills Restoration and Public Access Project NOP.pdf

Dear Karla,

Please find attached comments submitted on behalf of the Citizens Committee to Complete the Refuge, Friends of Coyote Hills and Ohlone Audubon Society.

We would appreciated acknowledgment of receipt of our comment letter at your convenience.

Regards, Carin High CCCR/FCH/OAS







18 June 2018

Karla Cuero, Environmental Programs Project Coordinator East Bay Regional Park District 2950 Peralta Oaks Court, Oakland, CA 94605

Re: Coyote Hills Restoration and Public Access Project Notice of Preparation (NOP)

Dear Ms. Cuero,

The Citizens Committee to Complete the Refuge (CCCR), Friends of Coyote Hills (FCH) and Ohlone Audubon Society (OAS) thank you for the opportunity to provide scoping comments for the proposed Coyote Hills Restoration and Public Access Project. Let us begin by commending East Bay Regional Park District for its recognition of the importance of the natural resource values of these lands as demonstrated by the emphasis of the preferred concept plan on the creation of "natural units." While we are encouraged by elements of the proposed plan, we still firmly believe to adequately protect the resources of Coyote Hills Regional Park and the areas proposed for restoration, additional changes are necessary.

Members of CCCR, FCHF and OAS fought for decades, and expended much time and energy, to protect the Patterson Ranch lands west of Ardenwood Boulevard from the adverse impacts of development not only to protect the extraordinary natural resources of Coyote Hills Regional Park, but also to preserve the tremendous restoration potential of the 296 acres of lands that were ultimately donated to the Park District. These efforts complimented a vision for the area long held by the scientific and environmental community.

One of the significant goals of protecting these lands was the restoration of the historic willow grove, remnants of which still survive, that once ran from Patterson Slough to Ardenwood Historic Farm. While such an extensive restoration is no longer possible due to development surrounding the parklands, a significant opportunity still exists to restore the historic willow grove in the area between Patterson Slough and the existing kiosk. This would enhance and increase in acreage this habitat that is extremely rare in the South Bay and that provides shelter and foraging, roosting and nesting habitat for migratory and resident song birds. This is consistent with and supported by language within the 2005 Coyote Hills Regional Park Land Use Plan (LUP). The LUP identifies the Willow Marsh (remnant willow grove) as an area of significant resource value. Also the willow woodland "has the greatest diversity of bird species within the park" and "it is the park's best bird habitat."

The Baylands Ecosystem Habitat Goals Report 1999¹ "Segment R – Coyote Hills Area" states:

... The marshes encircled Coyote Hills except to the east where moist grassland bounded the upper margin of the marsh. These grasslands were characterized by springs and seeps, willow groves, seasonal ponds...

¹ Goals Project. 1999. Baylands Ecosystem Habitat Goals. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. U.S. Environmental Protection Agency, San Francisco, Calif./S.F. Bay Regional Water Quality Control Board, Oakland, Calif.

...The diked baylands east of Coyote Hills support *the largest remaining willow grove in the baylands ecosystem*, seasonal and diked wetlands, and a permanent freshwater pond. [emphasis added]

Under "Unique Restoration Opportunities" the report states, "...On the eastern side of Coyote Hills, there are seasonal wetlands and willow grove habitat that could be restored or enhanced." These recommendations have been reiterated in the 2016 update. Fragments of this historic willow grove exist at the eastern boundary of Coyote Hills Regional Park and on the Patterson Ranch site. The current alignment of Patterson Slough represents the approximate northeastern boundary of the historic willow grove. Historically the willow grove tapered to the east all the way to Ardenwood Historic Farm. Willow grove habitat supports a tremendous diversity of wildlife species. The 2005 Coyote Hills Land Use Plan states the willow habitat within the Park boundaries supplies an abundant supply of insects that provide a food base nearly 100 species of wintering, migratory and breeding birds.

Project Description:

The Coyote Hills Restoration and Public Access Project does not appear to include active restoration. At the public meetings 11 landscape units were identified for the purposes of illuminating three project alternatives.

- Are restoration elements envisioned in the Restoration and Public Access Plan? How does EBRPD define
 restoration relative to this project? Does EBRPD simply intended to preserve the land or are enhancement and
 restoration activities proposed? There is no description of the manner in which the acquired lands will be
 enhanced or restored. No information has been provided to describe how the restoration will be implemented
 and the amount of financial resources to be devoted to enhancing and restoring these lands.
- Please fully describe the restoration elements in the project description of the DEIR. The DEIR must provide details of any proposed habitat restoration. Will earth work be involved? Will plantings occur? What species of plants? What is the source material for any planting material? Will monitoring of plantings or habitat restoration occur?

It is difficult to assess the impacts of public access on the existing and proposed habitat restoration without more information describing these activities. This background information on the importance and unique restoration potential of the willow groves informs the comments that follow.

Preferred concept plan and consideration of alternatives:

- It is difficult to assess the spatial relationship between proposed project elements and known landmarks therefore we request that the potential elements of the proposed project be depicted on an aerial photo for the preferred alternative and for each alternative analyzed.
- Please indicate the distance to sensitive habitats for facilities proposed under any of the alternatives considered.
- The Draft Environmental Impact Report (DEIR) should provide an explanation for the siting of the proposed 98parking space parking lot and restroom. For example, the 2005 Coyote Hills Regional Park Land Use Plan (LUP) discusses the need for overflow parking for big events of the year. One such overflow area is a seasonal wetland site in the Willow Run Area. The LUP states, "The Willow Run lot holds two times as many cars, but is more than twice as far and requires a large staff to direct traffic and parking and to run shuttle buses between the lot and Visitor Center." What is the purpose and value of locating a permanent parking lot in this area?
- Figure 3 of the NOP, "Draft Parking Concept" includes the phrase "open use area." What is an "open use area" and how does that differ from the proposed "picnic area?"
- Please provide landscaping details for the parking area and any of the proposed facilities.
- The DEIR should provide details regarding the proposed picnic area including the dimensions of the picnic facilities, number of picnic sites, whether these sites would include grills, any other amenities that are being considered as part of the picnic area, any proposed landscaping or lighting, and distance to sensitive habitats.

Parking and picnic areas should be moved south of Patterson Ranch Road:

We urge the EBRPD to provide an alternative that locates the proposed 98-space parking lot and proposed picnic area south of Patterson Ranch Road and away from the sensitive willow grove habitat. Such an alternative was depicted on slide 40 of the August 14, 2017 Powerpoint presentation from public workshop #1 (attached).

There are several benefits to such an alternative. The first and of most concern to our organizations, is that it would move intensive human activity away from sensitive habitats such as the willow/riparian habitat along Patterson Slough and the area proposed for restoration of the historic willow grove.

According to Figure 2 "Draft Conceptual Site Plan (Preferred Option), it appears that the proposed picnic area is immediately adjacent to Patterson Slough willow/riparian habitat and the proposed parking lot is within 500 feet of the willow/riparian habitat. The DEIR must identify the impacts of locating these facilities within proximity to this sensitive habitat.

• The DEIR must must identify and analyze the impacts of locating these facilities within proximity to this sensitive habitat. Impacts that should be included in this discussion are human disturbance, noise, attraction of nuisance species, maintenance activities required to maintain the facilities, impacts of dogs, etc.

The LUP has identified existing "Willow Marsh" habitat as a "Special Protection Feature." "Special Protection Features" are defined as "unique or fragile natural, cultural, aesthetic or educational features that need the greatest amount of protection or require specialized types of management." As was mentioned previously, the LUP identifies the importance of the Willow Marsh to wintering, migratory and breeding birds and that it is the best habitat for birds within the park.

Scientific literature is rife with documentation of the adverse impacts of human disturbance on bird behavior, nesting, the survivorship of nestlings, etc. Piper and Catterall 2005² conducted a study to assess whether picnic areas had impacts on birds in adjacent eucalypt forests in Australia. They concluded that "picnic areas exert strong localized edge effects on forest bird assemblages, and are likely to cause reduced reproductive success for small-bodied forest bird species which attempt to nest nearby."

Parking and picnic facilities located south of Patterson Ranch Road could be designed to embrace the agricultural history of the land and provide easy access should a farm stand become part of the operation. Short-term parking stalls could be designated for those who only wish to patronize the farm stand. Access to the parking and picnic areas could be separated from access needed for the agricultural operation to avoid disruption of either activity.

Fragmentation of habitat by proposed trails:

The title of the NOP refers to "Restoration" however the preferred plan is riddled with trails right up to the edge of, and into habitats identified by the LUP as "sensitive" habitats. The Patterson Slough East Spur, Patterson Slough West Spur and the Wetlands View Spur must be removed. A number of the proposed new trails are labeled as "multi-use trails." These multi-use trails lead right up to, or are adjacent to, or completely encircle sensitive habitats.

² Piper, Scott D. and Carla P. Catterall. 2006. *Impacts of picnic areas on bird assemblages and nest predation activity within Australian eucalypt forests*. Landscape and Urban Planning 78: 251-262.

Miller, Knight and Miller 1998³ found that "trails affect the distribution and abundance as well as the reproductive success of bird species, suggesting the need for more insightful trail planning and management of recreationists in natural areas." Jordan 2000⁴ summarized studies of human disturbance on breeding birds:

"Several references document negative impacts on breeding bids of recreational trails as narrow as 1-3m wide in forest and grasslands (Miller et al. 1998, Hickman 1990), as well as by dirt roads and powerlines (Kroodsma 1982, Askins 1994). The negative impacts included decreased nesting near trails, altered bird species composition near trails, and increased nests predation by cowbirds, skunks, raccoons and foxes using the clearings as corridors. These effects are possible even if the forest canopy is not opened by the trail (Hickman 1990). "

Fletcher, McKinney and Bock 1999⁵ reported, "Our study suggests both that riparian corridors are important areas for wintering raptors and that trails may displace raptor perch use away from riparian habitat."

Trulio and White ⁶ undertook an experimental approach to investigate wintering waterfowl responses to introduced trail use at foraging sites with and without recreational trails along the salt pond habitats of the San Francisco Bay. Waterfowl were exposed to trail use in the form of two researchers walking levees adjacent to ponded habitat, and the number of waterfowl by species were compared before and after experimental walks in 40-m bands starting at the levee and extending 200 m into the ponds. The researchers recorded distances to the nearest individuals, responses of focal animals, and numbers of recreational trail users. The most numerous species were Ruddy Duck (Oxyura jamaicensis), Northern Shoveler (Anas clypeata), and scaup spp. (Aythya affinis and A. marila). Recreational trail use rates at trail sites averaged 1 to 82 people/hr. The greatest difference in numbers of birds before vs. after experimental walks occurred in the two 40-m bands closest to the levee at non-trail sites. The relationship between the ratio of before to after-walk waterfowl numbers vs. date since the start of the winter season and the total number of birds vs. the number of recreational trail users did not indicate increasing tolerance to trail use for waterfowl overall. However, species varied in their tolerances. Distances (using the 95th percentile) that individual birds were recorded from researchers during experimental walks varied from approximately 170-200 m at both non-trail and trail sites. These study results have direct implication for the trails proposed around and into the mitigation ponds proposed by the Alameda County Public Works Flood Control Area (Landscape Unit #11).

These studies confirm the impacts of recreational trail use on bird behavior and breeding success. Other studies have indicated recreational trail use may alter species diversity and composition in areas adjacent to trails.

- Based upon this information we urge EBRPD to consider and implement an alternative that removes the Patterson Slough east and west spur trails.
- We also urge EBRPD to remove the Wetlands View Spur. As it is, the area at the southern end where Alameda County Public Works is conducting its work will be completely surrounded by trails. The addition of the spur would fragment habitat and bring human disturbance even closer to birds and wildlife utilizing the areas of ponding, and we assume adjacent wetlands habitat. We understand the need for access and therefore the proposed "multi-use" trails surrounding the area where Alameda County Public Works is conducting work, however, EBRPD should provide a discussion of how wildlife utilizing these areas would be protected from human disturbance, e.g. would vegetation be planted or be allowed to establish along the edges of the ponded

CHRP Restoration Public Access NOP

³ Miller, Scott G., Richard L. Knight, Clinton K. Miller. 1998. Influence of Recreational Trails on Breeding Bird Communities. Ecological Applications, 8: 162-169. doi:10.1890/1051-0761(1998)008[0162:IORTOB]2.0.CO;2

⁴ Jordan, M. (2000). Ecological impacts of recreational use of trails: a literature review. The Nature Conservancy, New York.

⁵ Fletcher, Robert J. Jr., Shawn T. McKinney and Carl E. Bock. 1999. *Effects of recreational trails on wintering diurnal raptors along riparian corridors in a Colorado grassland*. J.Raptor Res. 33(3):233-239

⁶ A. Trulio, Lynne & R. White, Heather. (2017). Wintering Waterfowl Avoidance and Tolerance of Recreational Trail Use. Waterbirds. 40. 252-262. 10.1675/063.040.0306.

areas? Will dogs be restricted from trails in this area? Will Alameda County Public Works be responsible for maintenance activities of this area? Are there specific vegetation management requirements?

- An explanation should be provided regarding the rationale for a new multi-use trail within the Patterson Slough Natural Unit. Impacts of human disturbance on wildlife utilizing Patterson Slough, the mixed riparian forest and oak savannah must be identified and analyzed.
- The DEIR should indicate whether dogs will be allowed on any of the proposed new trails and if they are potential impacts must be identified and analyzed.

Information and analyses that should be incorporated into the DEIR:

- The DEIR should provide information regarding the elements of any construction that is proposed and identify and analyze impacts related to noise, lighting, vibration, alteration of terrain, length of time of disturbance, any construction window restrictions, etc.
- A biological monitor must be required for any construction disturbance adjacent to sensitive habitats and preconstructions surveys and methodology should be discussed.
- Please provide a treatment plan for dealing with invasive species. This includes both invasive plants within the areas proposed and adjacent to restoration activities, as well nuisance species that may be attracted to the parking lot and picnic areas.
- Please include a description of the agricultural activity including whether there are any conditions that went with the land when the land was donated to EBRPD regarding the continuation of agriculture, if so, was there a specified location or acreage, water supply, whether there will be a farm stand, details that can be shared regarding the lease agreement, etc.

Under the cumulative impact analysis, the DEIR should address whether the elements proposed are consistent with the 2005 LUP, and how the addition of these 306 acres may affect elements of the LUP. As an example, the LUP states that the "Lake Unit" (former Dumbarton Quarry site) would become the recreational center of the park and that "large recreational spaces may not be needed in the future because of the eventual addition of the Lake Unit." If this is the case, why is there a need for a picnic area near the area to be restored to oak savanna and mixed riparian forest?

The cumulative impact section should also provide information on any reasonably foreseeable park construction that may occur within the lands covered by the LUP. As an example, there have been discussions for many years regarding the need to upgrade the Visitor Center. In October 2017, EBRPD issued a Request for Qualification for a Feasibility Study "to be conducted that consists of the following: site analysis, building and site facility program, conceptual building/site plans, and construction cost estimates." The 2005 LUP had analyzed four alternatives for the Visitor Center including relocation. If relocation is being considered, there could be cumulative impact ramifications for elements of the proposed "Restoration and Public Access Plan."

Thank you for the opportunity to provide scoping comments. As has been mentioned above, our organizations spent many years working to ensure the 306-acres of the Patterson Ranch lands would be protected for current and future generations. We have actively worked to promote the incredible wildlife values of the park through public outreach and through education programs such as the Habitat Means Home Poster Contest that we have sponsored for K-6 students in the Fremont, New Haven and Newark Unified School Districts. The poster contest celebrates the incredible habitat diversity of Coyote Hills Regional Park and emphasizes the need to protect "habitats" for plants and wildlife. This is emphasized in the spirit of the comments we have submitted.

We request that we be kept informed of any future opportunities to provide comments and that we be informed of the release of the DEIR.

We do have concerns regarding the proposed timeline for the release of the DEIR. The timeline presented during the scoping session indicated the DEIR would be released before the end of this year. While we do not wish for this process to drag on unnecessarily, we do hope the issues and concerns we have identified in this letter will be analyzed and incorporated into the DEIR.

Sincerely,

Carin High

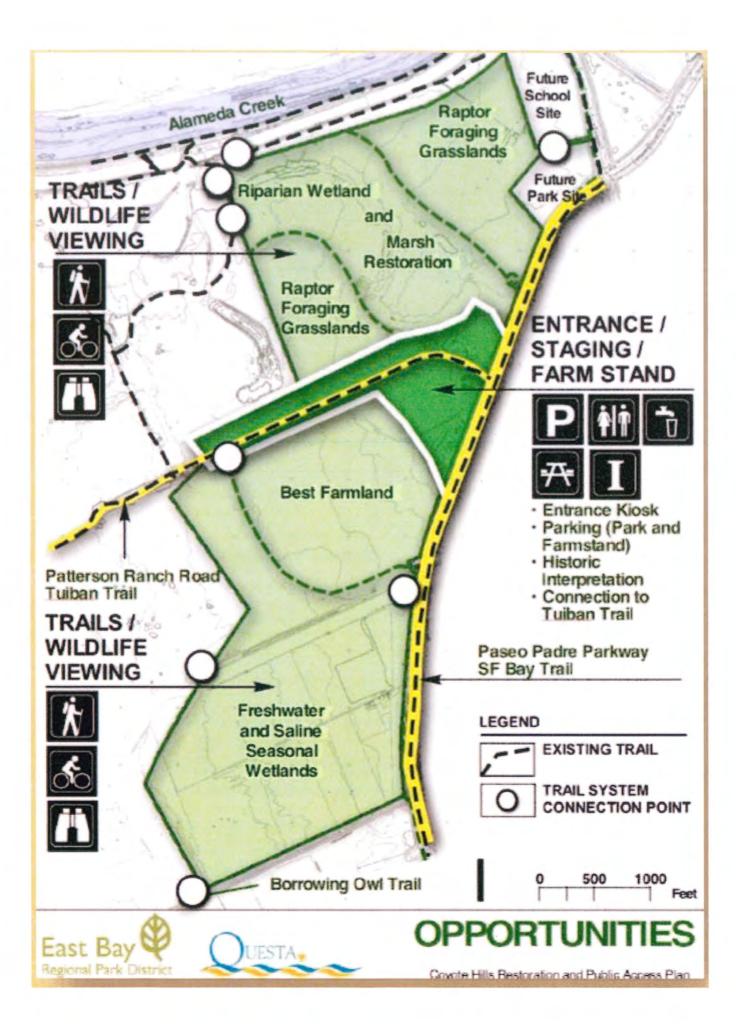
CCCR Co-Chair cccrrefuge@gmail.com

Jana Schall

CCCR/FCH Member cccrrefuge@gmail.com

dellant

President OAS President@OhloneAudubon.org



Potential alternative location for parking lot and picnic area

Access for parking lot, picnic area, farm operations



Native American Heritage Commission Native American Contacts

2/20/2017

Coastanoan Rumsen Carmel Tribe Tony Cerda, Chairperson 244 E. 1st Street Ohlone/Costanoan Pomona , CA 91766 rumsen@aol.com (909) 524-8041 Cell (909) 629-6081 Indian Canyon Mutsun Band of Costanoan Ann Marie Sayers, Chairperson P.O. Box 28 Ohlone/Costanoan Hollister , CA 95024 ams@indiancanyon.org (831) 637-4238

Amah MutsunTribal Band of Mission San Juan Bautista Irenne Zwierlein, Chairperson 789 Canada Road Ohlone/Costanoan Woodside , CA 94062 amahmutsuntribal@gmail.com (650) 851-7489 Cell (650) 851-7747 Office (650) 332-1526 Fax

North Valley Yokuts Tribe Katherine Erolinda Perez, Chairperson P.O. Box 717 Ohlone/ Linden , CA 95236 Northern canutes@verizon.net Bay Mive (209) 887-3415

Ohlone/Costanoan Northern Valley Yokuts Bay Miwok

Muwekma Ohlone Indian Tribe of the SF Bay Area Rosemary Cambra, Chairperson P.O. Box 360791 Ohlone / Costanoan , CA 95036 Milpitas muwekma@muwekma.org (408) 314-1898 (510) 581-5194

The Ohlone Indian Tribe Andrew Galvan P.O. Box 3152 Fremont , CA 94539 chochenyo@AOL.com (510) 882-0527 Cell

Ohlone/Costanoan Bay Miwok Plains Miwok Patwin

(510) 687-9393 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the Questa East Bay Regional Park District- Habitat Restoration, Alameda County

Nor 200 Privarlal

Corrina Gould, Spokesperson Confederated Villages of Lisjan 10926 Edes Ave Oakland CA 94603 510-575-8408 corrinagould@gmail.com

6/18/18

Karla Cuero kcuero@ebparks.org

Dear Ms Cuero,

I am writing on behalf of the Confederated Villages of Lisjan/Ohlone in response to the Coyote Hills Restoration Project.

Our tribe has some concerns about this project as it is located within an area of sensitivity and known cultural sites. We noticed in your presentation that you stated that there would be minimal excavation. What does designed to minimize excavation mean? How much is minimal excavation? Can you please also tell us who the consulting agencies you are working with are? Was the NAHC and OHP given notice about this project? We are requesting that you send all reports and associated site records for this project to the tribe. As this project has a known site within its boundaries, how does the EBRPD plan to keep the general public from looting or destroying our sacred site?

Furthermore, the Confederated Villages of Lisjan would like AB52 consultation on this project, any project since June 2015 and any projects occurring currently and all future projects.

Sincerely,

Corrina Gould, Spokesperson Confederated Villages of Lisjan

Himr'n Tribe

5816 Thornton Newark CA 94560

6/18/18

Karla Cuero East Bay Regional Park District

Dear Karla Cuero East Bay Regional Park District:

I am submitting this letter on behalf of my Tribe, Himr'n in response to the Coyote Hills Restoration Project scoping meeting.

Our tribe is requesting any associated site records and reports for the project area that you are planning to create land disturbance within this project site. We are concerned with excessive land movement within a known area of cultural historic relevance to the tribe and would like to know how you plan to address the area of sensitivity and possible disturbance of known sites as well as possible not known sites? What is EBRPD plans to include signage for the area about the Native Peoples/Ohlone Tribes of the area?

Furthermore, Himr'n Tribe is asking for AB52 local consultation on this project and any projects that EBRPD has started since June of 2015 and any projects going into the future.

Sincerely, annare Gar

Ramona Garibay

Himr'n Tribal Historic Preservation Officer

Himr'n Tribe

5816 Thornton Newark CA 94560

6/18/18

Karla Cuero East Bay Regional Park District

Dear Karla Cuero East Bay Regional Park District:

I am submitting this letter on behalf of my Tribe, Himr'n in response to the Coyote Hills Restoration Project scoping meeting.

Our tribe believes that there are known tribal cultural resources on the site that EBRPD intends to move land on during this project. Known sites have been found along Alameda Creek and Crandall Creek Trail and to our knowledge there are some fencing that currently cordons off part of the site, we would like to know what measures would be taken to stop the potential increase of looting and foot traffic on our sacred sites? Were the Native American Heritage Commission and Office of Historical Preservation given notice about this project? We would like for the Draft Environmental Impact Report to Include comments for all areas of the following areas; archeological, pre-contact and tribal cultural resources. We also notice that you are hoping to plant oak trees in this project, we would like to request that if this project is approved, you will use the same native stock that already exists in the park area.

Furthermore, Himr'n Tribe is asking for AB52 local consultation on this project and any projects that EBRPD has started since June of 2015 and any projects going into the future.

Sincerely,

th Orta

Himr'n Traditional Tribal Chair

STATE OF CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION Environmental and Cultural Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone (916) 373-3710 Fax (916) 373-5471 Email: nahc@nahc.ca.gov Website: http://www.nahc.ca.gov Twitter: @CA_NAHC

JUL - 2 2018



June 27, 2018

Karla Cuero East Bay Regional Park District PO Box 5381 Oakland, CA 94605

RE: SCH#2018062002 Coyote Hills Restoration and Public Access Project

Dear Ms. Cuero,

The Native American Heritage Commission has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3). AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015. If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). Both SB 18 and AB 52 have tribal consultation requirements. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of <u>portions</u> of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within
 fourteen (14) days of determining that an application for a project is complete or of a decision by a public
 agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or
 tribal representative of, traditionally and culturally affiliated California Native American tribes that have
 requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
- Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
- 3. <u>Mandatory Topics of Consultation If Requested by a Tribe</u>: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
- 4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
- 5. <u>Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:</u> With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
- Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).
- <u>Conclusion of Consultation</u>: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
- <u>Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:</u> Any
 mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section
 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation
 monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources
 Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §
 21082.3 (a)).
- 9. <u>Required Consideration of Feasible Mitigation</u>: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - **b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

- <u>Tribal Consultation</u>: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe. (Gov. Code § 65352.3 (a)(2)).
- <u>No Statutory Time Limit on SB 18 Tribal Consultation</u>. There is no statutory time limit on SB 18 tribal consultation.
- <u>Confidentiality</u>: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
- 4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
 - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
- 2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
- 3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - **b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
- Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions, please contact me at my email address: frank.lienert@nahc.ca.gov

Sincerely,

Frank Lienert Associate Governmental Program Analyst

cc: State Clearinghouse

Karla Cuero

Rod Schurman <rods@unionsanitary.ca.gov></rods@unionsanitary.ca.gov>
Monday, August 06, 2018 1:10 PM
Karla Cuero
Coyote Hills Restoration & Public Access Project, Preliminary Comments
USD_BlockbookPages.zip

Hi Karla,

USD received the EIR notice for the subject project and we wanted to provide some preliminary project comments NOT related to the EIR:

- <u>Project Area vs. USD Service Area</u>: The project area is outside of USD's Service Area. If restrooms or other
 project structures are intended to discharge wastewater to USD sanitary sewer collection system, the area will
 need to be Annexed via LAFCo of Alameda County.
- <u>Private Sewer Improvements</u>: It is assumed all sanitary sewer improvements for the project will be private. Note that all sanitary sewer construction outside of a building's footprint must be inspected and approved by USD (if it will discharge wastewater to USD). Plans will need to be submitted to USD for review even if no wastewater will be discharged to USD so that USD can confirm that is the case. Please complete the following form when submitting plans to USD for review,
- https://www.unionsanitary.ca.gov/images/documents/PlanCheckRequestPDF.pdf
 USD Facilities: USD has twin 33" Sewer Force Mains (FMs) that cross Paseo Padre near Kaiser Dr. and are on the west side of Paseo Padre in the wetlands to well north of the project limits (see attached maps). These 33" pipes are within USD easements and are single-gasketed joint RCP and as such are susceptible to joint leakage/damage from excessive loads. Any construction within our easements or construction traffic over our FMs requires specific approval from USD. For construction traffic/haul roads, USD requires an Encroachment Permit that may include a specific agreement and temporary improvements to bridge over our FMs (depending
- upon the weight of the vehicles, ranges from steel plates to railcar bridges).
 <u>Improvements in USD Easements</u>: For permanent improvements in our easements, USD only allows surface improvements such as landscaping, roadways and parking, including sidewalks, curbs & gutters. No permanent structures and trees are allowed (plants, bushes and groundcover are allowed). Utilities may cross our easements/FMs provided there is sufficient clearance between them. Plans must be submitted for review and approval, for more info see <u>https://www.unionsanitary.ca.gov/permits-and-fees/forms-documents-ordinances</u>

USD has not other comments at this time. Please contact me if any questions.

Regards, Rod Schurman, P.E. Technical Services Engineer Customer Service Direct (510) 477-7617 Fax to email (510) 477-7317

Union Sanitary District

5072 Benson Rd., Union City, CA 94587-2508 P.O. Box 5050, Union City, CA 94587-8550 (510) 477-7500 www.unionsanitary.ca.gov

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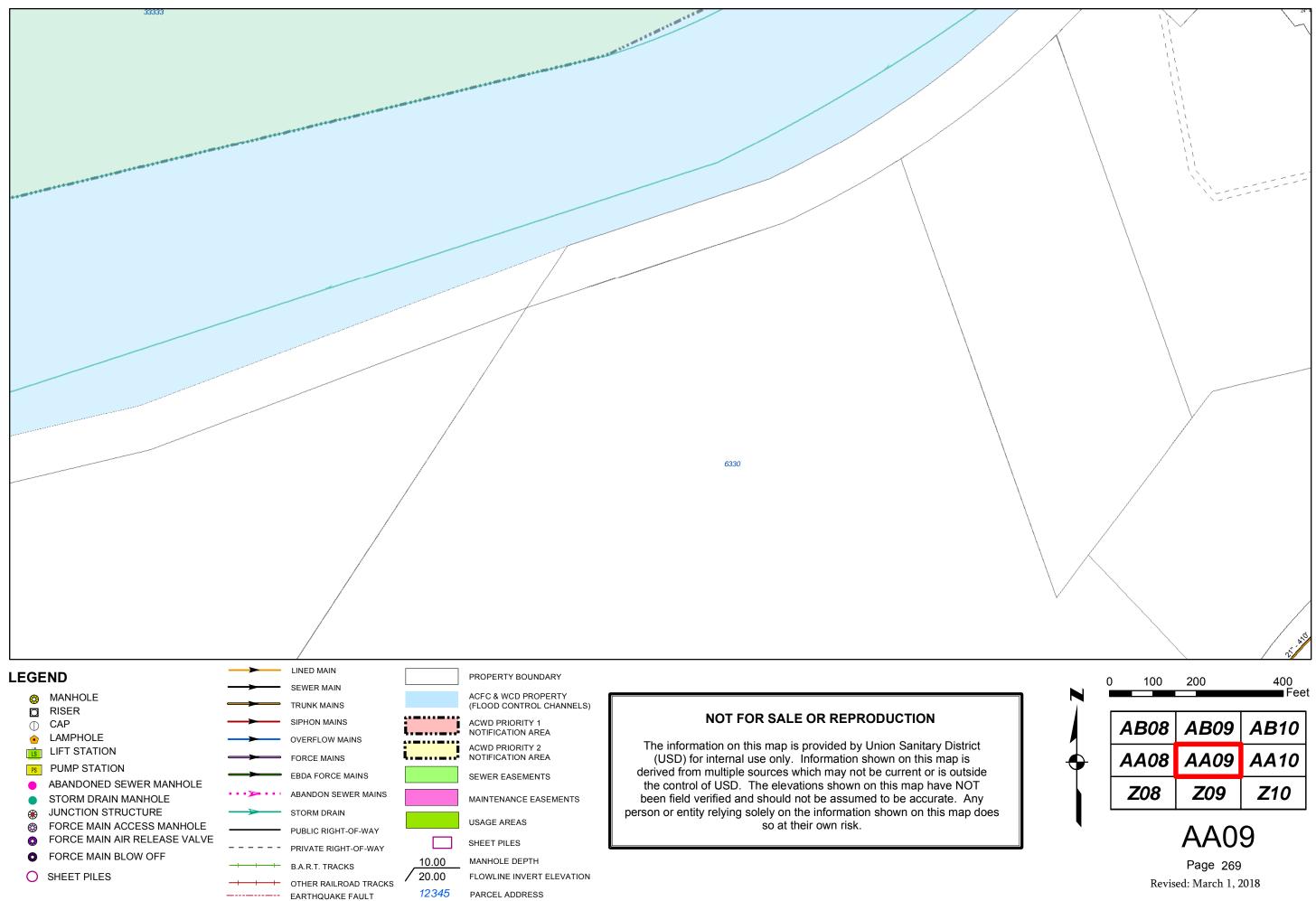
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Page 268 Revised: March 1, 2018



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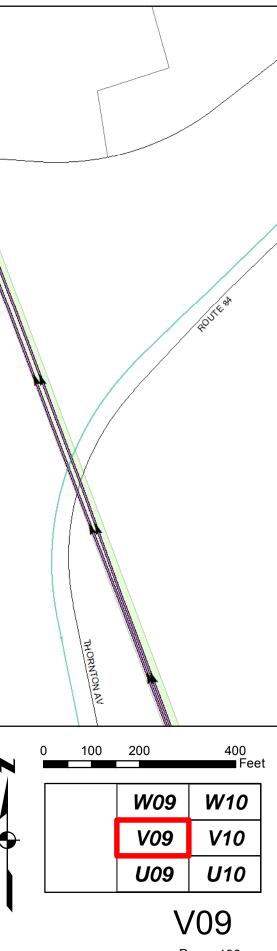
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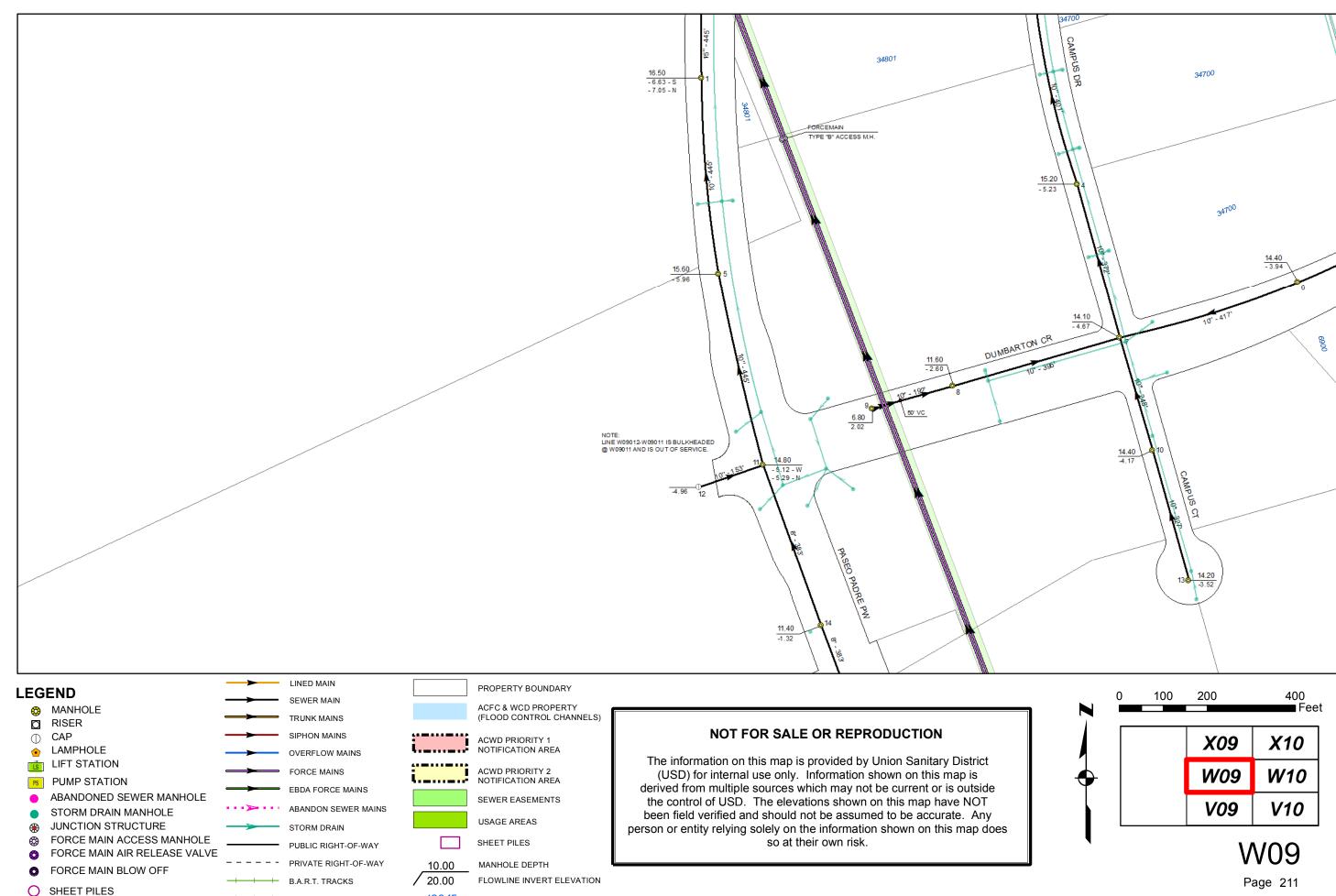
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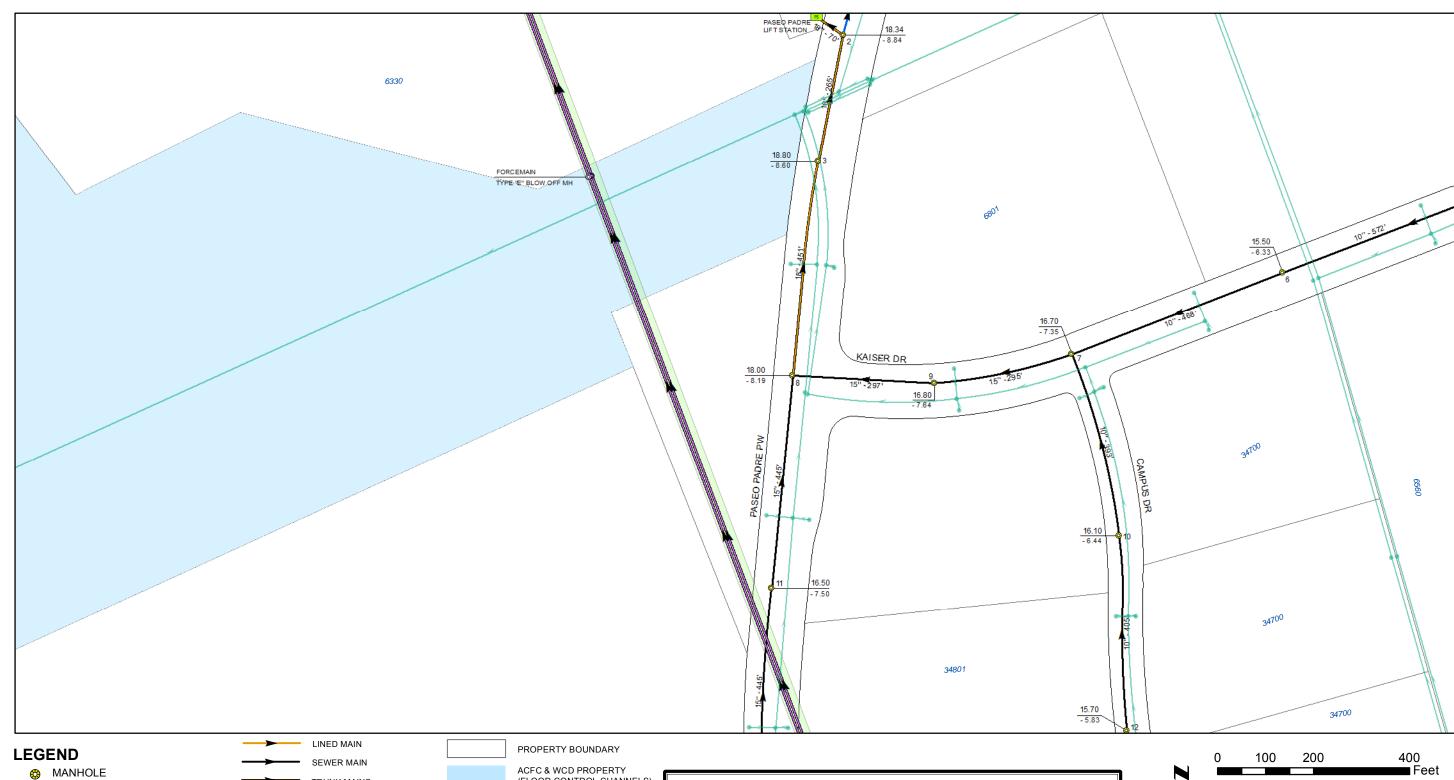


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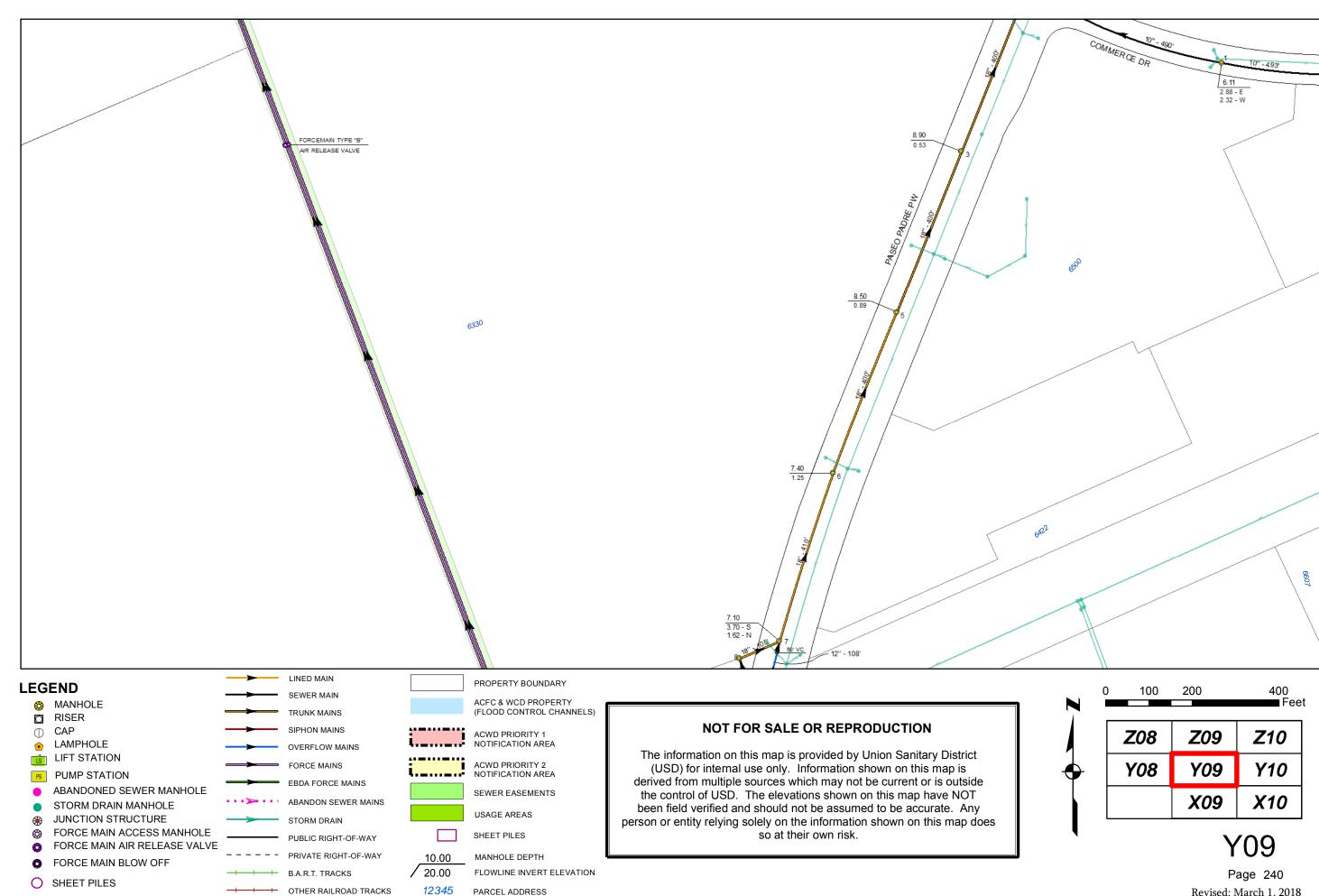
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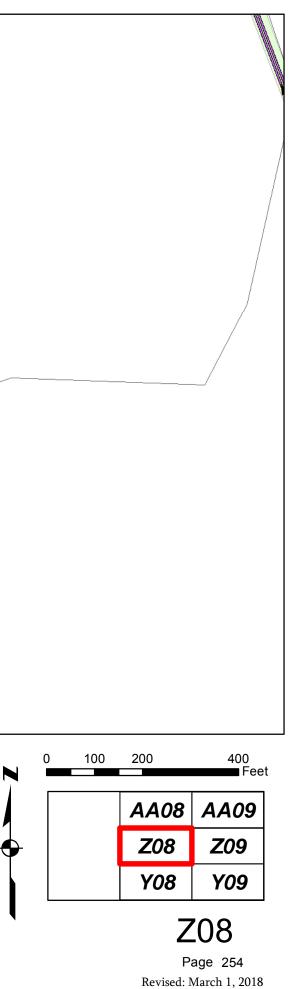
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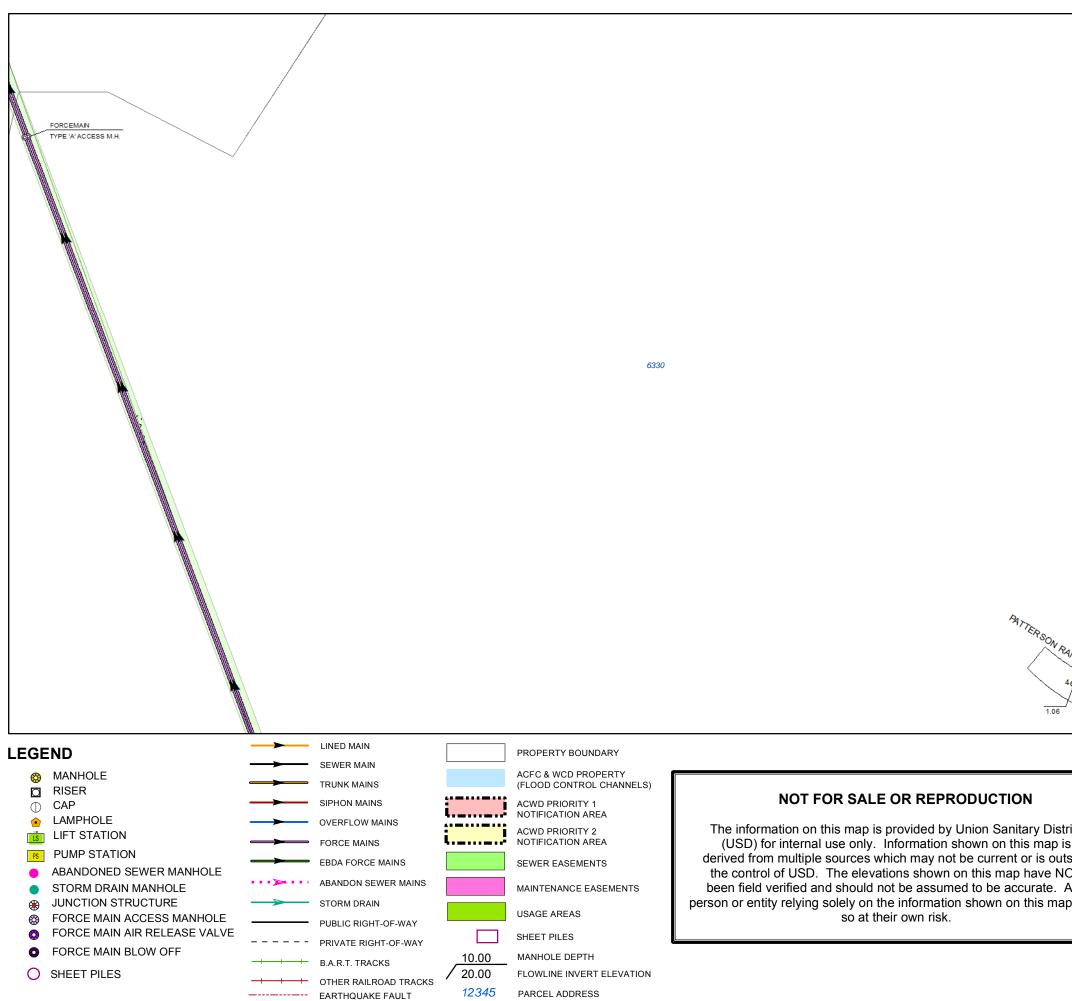
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Revised: March 1, 2018



Sept 12, 2018

Ramona Garibay Himr'n Tribal Historic Preservation Officer 5816 Thornton Avenue Newark, CA 94560

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Ramona,

Thank you for your letter dated June 18, 2018. You requested information about the Project and we anticipate that many of your questions will be covered in the Draft Environmental Impact Report (EIR). The Draft EIR will tentatively be available for public review and comment in late October 2018, and we welcome your input on these and other topics of interest to you.

Your letter also requests consultation under AB 52 (codified in Public Resources Code § 21080.3.1). The District notified the Native American Heritage Commission (NAHC) of this project in February 2017. The NAHC provided a list of Native American Tribes with an interest in the project area, and the Representative from each of these Tribes was sent correspondence regarding the project inviting Tribes to notify the District if they wished to engage in consultation (please find this list attached). Andrew Galvan was listed as the contact for the Ohlone Indian Tribe and identified as the Most Likely Descendant. Mr. Galvan requested consultation with the Park District which was held on April 26, 2018.

Additionally, you have requested a list of projects initiated on or after June 2015. We are providing the requested information in the table below. Pursuant to AB 52, the Park District, as part of CEQA review for each of these Projects, reached out to the NAHC for a list of California Native American Tribes to be notified. Accordingly, notification was sent to each tribal representative identified on that list for each of these projects.

Project Name/	Location	Date of Invitation to Tribal
CEQA Document		Consultation
Black Diamond Mines Land Use Plan Amendment (LUPA)-EIR	Antioch, CA	10/13/2016
Coyote Hills Restoration & Public Access - EIR	Fremont, CA	02/22/2017
Doolittle – SF Bay Trail – IS/MND	Oakland, CA	01/04/2018
Dunsmuir to Chabot Trail – IS/MMD	Oakland, CA	03/22/2018
Encinal Beach Restoration – IS/MND	Alameda, CA	Nov. 2016
Garin to Vargas Bay Area Ridge Trail – IS/MND	Fremont, CA	12/15/2017
SF Bay Trail: Lone Tree Point – IS/MND	Rodeo, CA	12/22/2017
Miller/Knox LUPA - EIR	Richmond, CA	10/23/2017
Pt. Isabel Water Trail Launch – IS/MND	Richmond, CA	04/06/2017
Sibley LUPA - EIR	Oakland, CA	9/25/2017
Tilden Sediment Basin Dredging – IS/MND	Berkeley, CA	Mar. 2016
SF Bay Trail: Point Molate – IS/MND	Richmond, CA	2/2/2016

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As you have expressed an interest in receiving notifications of future projects and project updates, the Park District will add you to our notification list. Thank you for your comments, and we invite your participation during the Public Review Period for the Draft EIR.

Sincerely,

Kalleduen

Karla Cuero Project Coordinator

Dennis Waespi President Ward 3 Ayn Wieskamp Vice-President Ward 5

Ellen Corbett Treasurer Ward 4 Dee Rosario Secretary Ward 2 Whitney Dotson Ward I

Board of Directors

Beverly Lane Ward 6

Colin Coffey Ward 7



Sept 12, 2018

Corrina Gould Spokesperson Confederated Villages of Lisjan 10926 Edes Ave. Oakland, CA 94603

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Corrina,

Thank you for your letter dated June 18, 2018. You requested information about the Project and we anticipate that many of your questions will be covered in the Draft Environmental Impact Report (EIR). The Draft EIR will tentatively be available for public review and comment in late October 2018, and we welcome your input on these and other topics of interest to you.

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Ellen Corbett Treasurer Ward 4 Dee Rosario Secretary Ward 2 Whitney Dotson Ward I

Board of Directors

Beverly Lane Ward 6

Colin Coffey Ward 7



Sept 12, 2018

Ruth Orta Himr'n Traditional Tribal Chair 5816 Thornton Avenue Newark, CA 94560

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Ruth,

Thank you for your letter dated June 18, 2018. You requested information about the Project and we anticipate that many of your questions will be covered in the Draft Environmental Impact Report (EIR). The Draft EIR will tentatively be available for public review and comment in late October 2018, and we welcome your input on these and other topics of interest to you.

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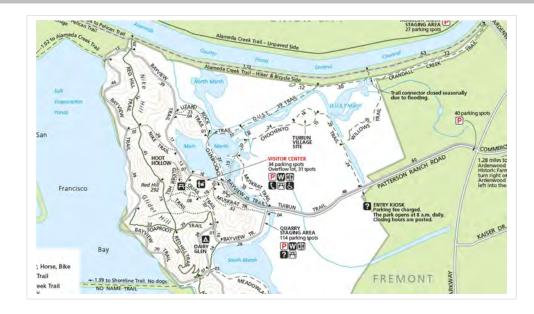
Board of Directors

Beverly Lane Ward 6

Colin Coffey Ward 7

Appendix C Traffic Impact Report

Coyote Hills Regional Park Expansion Traffic Impact Report



February 2019

Prepared for:

East Bay Regional Parks

Prepared by:



In association with



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1 Introduction

This report presents an analysis of existing and future transportation conditions near the Coyote Hills Regional Park (Park) in the City of Fremont. This study is being performed on behalf of the East Bay Regional Parks District (District) to assess potential transportation impacts associated with the Park's planned improvements (Project).

The existing Coyote Hills Regional Park is in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84. The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, nearly 4 miles of hiking trails, wildlife platforms, and approximately 240 acres of habitat restoration and enhancement lands.

The primary study area is the intersection of Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive, which is the park's primary vehicular access, and an important pedestrian and bicycle access. Figure 1 presents a map of the project area.

Under existing conditions, this report assesses the vehicle traffic operations, bicycle and pedestrian access, and collisions within the last ten years. Under future conditions, this report assesses the projected vehicle traffic operations with planned local growth under Near-Term and Cumulative conditions, without and with the proposed project. The report concludes with a summary of impacts and presents potential improvements to resolve existing deficiencies and those that could arise with background growth and the proposed project.

The transportation study was completed in accordance with the criteria established by the City of Fremont.



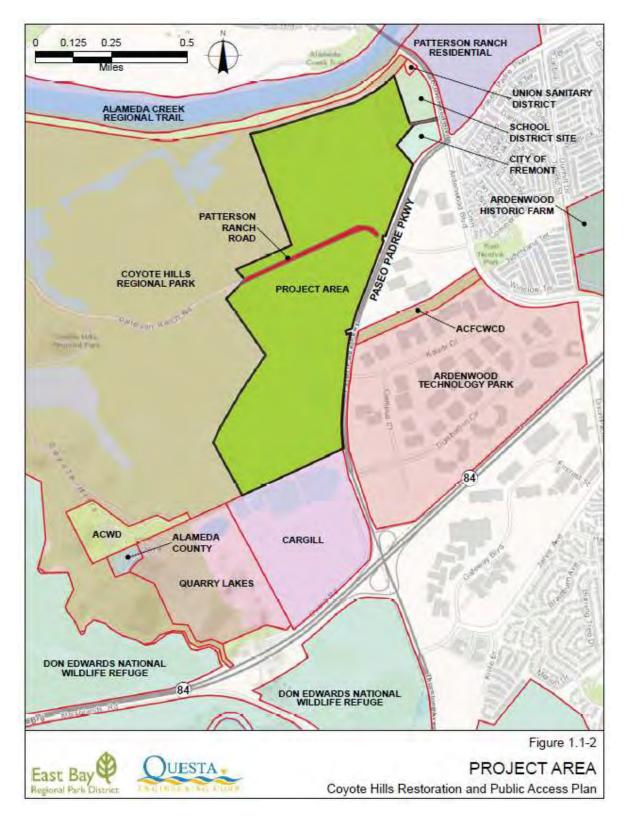


Figure 1 Project Study Area

February 2019

2 Existing Transportation Setting

This section provides an evaluation of traffic and transportation issues related to the Project. Descriptions of the existing roadway network, intersections, transit service, and bicycle and pedestrian facilities are provided below.

2.1 VEHICLE NETWORK

The following section describes the vehicle, pedestrian, and bicycle facilities; and transit service that provide access to the project site.

Paseo Padre Parkway is a major arterial that runs along the City of Fremont's western periphery; it provides access between Interstate 880 (I-880) and the City of Newark. In the project vicinity, Paseo Padre Parkway runs in the north-south direction and has two lanes in each direction near the Project; on-street parking is not allowed. The posted speed limit is 45 MPH.

Commerce Drive runs in the east-west direction between Paseo Padre Parkway and Tupelo Street, and has a posted speed limit of 35 MPH. Commerce Drive services office uses between Paseo Padre Parkway and Ardenwood Boulevard, and recreational and residential uses between Ardenwood Boulevard and Tupelo Street. It has one through lane and one parking lane in each direction.

Patterson Ranch Road is the primary vehicular access to the Park and provides connection to multiple trials that connect at the Park. The rad has two lanes and runs east-west within the project study area.

Ardenwood Boulevard is a four-lane arterial running north-south between Alameda Creek and Fremont City Limits / SR-84. North of Paseo Padre Parkway, Ardenwood Boulevard becomes Union City Boulevard, and is one alternative route to Interstate 880. South of State Route 84 / Fremont City Limits, Ardenwood Boulevard becomes Newark Boulevard. Ardenwood Boulevard has a posted speed limit of 40 mph and runs along a short section of the Park's east boundary.

Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive is a four-legged, unsignalized intersection. Both Patterson Ranch Road and Commerce Drive are subject to minor-approach stop control (east and west legs); Patterson Ranch Road is not subject to traffic control, although traffic is required to yield to pedestrians and bicyclists in the crosswalks. The right turn movements from northbound Paseo Padre Parkway and Commerce Drive provide channelized turn lanes ("pork chops") subject to yield-control to pedestrians and intersecting traffic. There are marked crosswalks at all four legs of the intersection.

Pedestrian, bicycle and vehicle counts were collected at the study intersection on June 23, 2017. The counts and existing intersection geometry are presented on Figure 2.

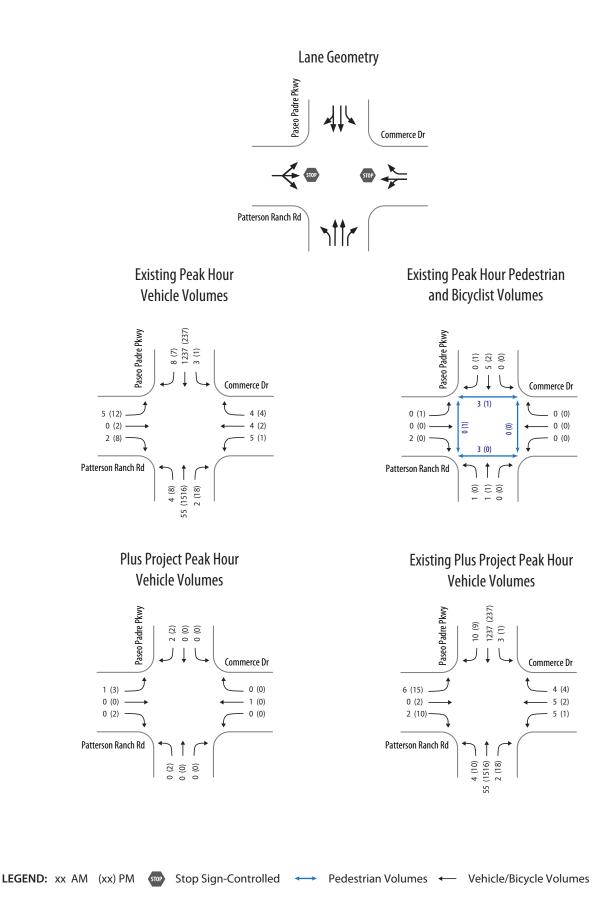


Figure 2 – Existing Intersection Geometry, Existing Base and Plus Project Peak Hour Volumes



Coyote Hills Regional Park Expansion

Coyote Hills Regional Park Expansion Project Traffic Study

2.2 PEDESTRIAN AND BICYCLE CIRCULATION

The **San Francisco Bay Trail** is a 500- mile walking and cycling path around the entire San Francisco Bay running through all nine Bay Area counties. In the project area, the Bay Trail runs along the west side of Paseo Padre Parkway. There is a planned route to connect to Alameda Creek Trail and Union City Boulevard on the north side of the project site. To the south, the Bay Trail connects with the Dumbarton Bridge via on-street bike lanes (Class 2 bikeways) and Coyote Creek Trail. Pedestrian access into the Park is also provided by the **Tuibun Trail**, which runs parallel to Patterson Ranch Road between Paseo Padre Parkway and the Visitor Center.

Bike lanes, or **Class II bikeways**, are provided on Paseo Padre Parkway. The existing bike lanes are a five to six-foot paved area demarcated by a painted line. There is no additional vertical or horizontal buffer provided between bicycle and vehicle traffic on Paseo Padre Parkway. There are no marked bikeway facilities on Commerce Drive and Patterson Ranch Road.

There are 10-foot **sidewalks** on the east side of Paseo Padre Parkway and an eight-foot sidewalk on south side of Commerce Drive. Pedestrian access on the west side of Paseo Padre Parkway is provided by the Bay Trail. Pedestrian access along Patterson Ranch Road is provided by the Tuibun Trail.

2.3 TRANSIT

Alameda-Contra Costa County (AC) Transit provides bus transit service to cities in the East Bay. The nearest transit stops to the project study area are located at the intersection of Ardenwood Boulevard and Commerce Drive, 1500 feet east of Paseo Padre Parkway.

Route SB is a regional commuter route between San Francisco and Fremont. Route SB travels along Ardenwood Boulevard and Union City Boulevard in the vicinity of the project site. Route SB only operates on weekdays, in the westbound direction between 5:25 a.m. and 9:00 a.m. and in the eastbound direction between 4:00 p.m. and 8:00 p.m. on 30-minute headways.

Route 232 is a local route that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 232 operates between NewPark Mall in the City of Newark and the Fremont BART station; it also stops at the Union City BART station. Route 232 operates with 60-minute headways on weekdays between 5:30 a.m. and 7:30 p.m. and during the weekend between 7:30 a.m. and 7:30 p.m.

Route 621 is a school service route open to the public that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 621 is a single-bus route that starts at the intersection of Ardenwood Boulevard. & Commerce Drive starting every weekday at 7:15 am and ending at Thornton Jr. High School. The returning bus starts at Thornton Jr. High School at 1:00 p.m. on Wednesday and 2:45 p.m. all other weekdays.

3 Proposed Project

The Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The 306-acre expansion area borders the east side of the existing Regional Park; is bounded to the west by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the to the north by the Alameda Creek Flood Control Channel. The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, four miles of hiking trails, wildlife platforms, and approximately 240 acres of habitat restoration and enhancement lands. The proposed project would also reconfigure the main Park entrance and formalize, i.e., pave and mark, some vehicle parking that currently occurs in an unpaved area west of Paseo Padre Parkway (Figure 3).

The existing peak hour vehicle trip generation at the park was estimated based on traffic counts of vehicles entering and exiting from Patterson Ranch Road at Paseo Padre Parkway. Traffic counts were collected on a typical weekday, June 23, 2017, and ingress and egress summarized in Table 1.

Scenario and Approach	AM Peak Hour (7-9 AM)			PM Peak Hour (4-6 PM)			
	In	Out	Total	In	Out	Total	
Existing Trip Generation	16	7	23	17	22	39	
Plus Project Growth (25%)	4	1	5	4	5	9	
Existing plus Project Trip Generation	20	8	28	21	27	48	

Table 1 Coyote Hills Regional Park Expansion Trip Generation

The East Bay Regional Parks District estimates that the park expansion will result in 25 percent more visitors during weekday AM and PM peak hours. Coyote Hills is increasing its size by approximately 25 percent, from 1266 acres by 306 acres. In the AM peak hour, Coyote Hills generates .02 trips / acre (five trip increase) and in the PM peak hour, Coyote Hills generates .03 trips / acre (nine trip increase).

The Institute of Transportation Engineers (ITE) <u>Trip Generation</u> (9th Edition) has data on County parks, with acreage ranging from less than 100 acres up to 1200 acres. In the AM peak hour, the average rate is 0.02 trips / acre, and in the PM peak hour, the average rate is 0.09 trips / acre (27 trip increase). Parks sampled by ITE ranged from less than 100 acres to 1200 acres. The park trip rates were highest for the smallest (<100 acres) and largest parks (1150 acres), each generating 10-12 trips in the AM peak hour and 65-75 trips in PM peak hour. The park trip rates were lowest for the two mid-size parks (250 and 550 acres), each generating between two and five trips in the AM peak hour and approximately 25 trips in the PM peak hour. The ITE data showed no correlation between park size and trip rates.

Coyote Hills Regional Park Expansion Project Traffic Study

Site amenities and programming varied widely between the ITE sampled parks, which included boating/swimming, ball fields, soccer fields, camp sites, picnic facilities and general open space. Sites were surveyed in 1970s and 2000s in New Jersey, California and North Carolina.

The Project's proposed trip increase (Table 1) matches ITE average rates in the AM peak hour and is lower than ITE in the PM peak hour. However, the traffic study's use of a 25 percent increase in trips is reasonable because it is proportional to Coyote Hill's expansion size, and the number of trips is within the range of observations collected by ITE. The lower rate in the PM peak hour is reasonable because Coyote Hills primarily serves as an open space park.

Both the existing trip generation and forecast growth are relatively modest compared to the adjacent traffic on Paseo Padre Parkway for several reasons. First, the park is largely unprogrammed open space that would not attract an intensity of users compared to City parks with more amenities (e.g., recreational fields). Second, open space park trips more typically occur outside the weekday commute peak or on weekends, whereas typical traffic analysis periods are weekday morning (AM) and afternoon (PM) commute peak hours. Although the park's trip generation may be higher outside the typical peak hours, the park's impact on the surrounding transportation network would be less because the transportation network would be experiencing less overall demand.

Coyote Hills Regional Park Expansion Project Traffic Study

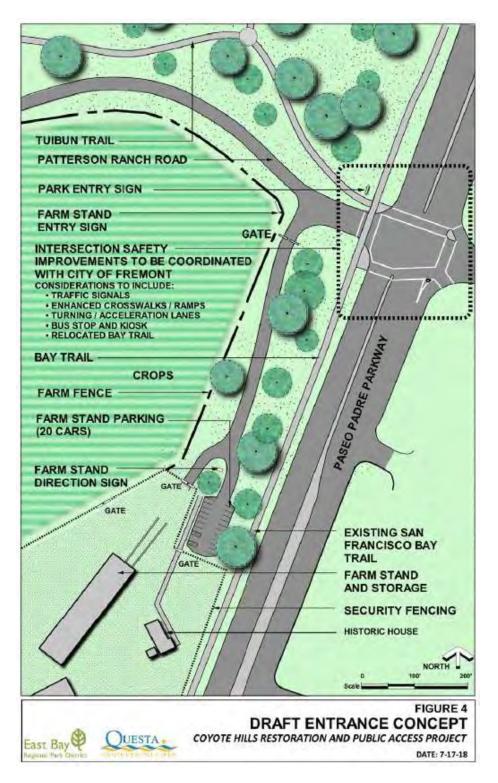


Figure 3 Proposed Project Access Modifications

4 Level of Service (LOS) Methodology

Per the City of Fremont's traffic impact study guidelines, the study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board, 2000. The HCM 2000 methodology defines intersection performance based on a concept called "level of service." Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time.

For unsignalized intersections, level-of-service criteria is divided into two intersection types: allway stop sign-controlled and side-street only stop sign-controlled. All-way stop-controlled intersection level of service is expressed in terms of the average vehicle delay of all the movements. Side-street only stop sign-controlled intersection level-of-service is defined in terms of the average vehicle delay for an individual approach. Typically, the delay of a side-streetonly stop sign-controlled intersection applies to the minor approaches because the major approach does not experience any delay. However, individual movement delay thresholds also apply to movements subject to yield control, like permitted left turns from the major-street approach. Table 2 summarizes the level-of-service criteria for unsignalized intersections.

For signalized intersections, level-of-service is measured in terms of the average total vehicle delay of all movements through the intersection. Vehicle delay at a signalized intersection is based variables that include traffic signal phasing, signal cycle length, and traffic volumes with respect to intersection capacity. Table 2 also summarizes the level-of-service criteria for signalized intersections.

Level of Service	Description	Signalized Delay	Unsignalized Delay
А	Insignificant	0 to 10 seconds	0 to 10 seconds
В	Minimal	> 10 to 20 seconds	> 10 to 15 seconds
С	Acceptable	> 20 to 35 seconds	> 15 to 25 seconds
D	Tolerable	> 35 to 55 seconds	> 25 to 35 seconds
E	Significant	> 55 to 80 seconds	> 35 to 50 seconds
F	Excessive	> 80 seconds	> 50 seconds

Table 2 Intersection Level of Service and Delay Def	initions
---	----------

Source: Transportation Resource Board, Highway Capacity Manual, 2000

The City of Fremont's LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized and unsignalized intersections.

5 Existing and Existing plus Project Conditions

This section estimates the vehicle operations at the study intersection under Existing and Existing plus Project conditions, identifies existing access issues for pedestrians and bicyclists, and summarizes collisions recorded since 2007. This section includes a qualitative analysis of the project's impact to regional trip patterns based on the State of California's latest guidance on assessing transportation impacts through Vehicle Miles Traveled (VMT).

5.1 VEHICLE LEVEL OF SERVICE

The Existing conditions scenario estimates the current vehicle delay at the intersection based on the traffic counts collected during the weekday a.m. and p.m. commute peak periods, which includes the existing vehicle traffic generated by the Coyote Hills Regional Park (Figure 2). The Existing plus Project conditions estimate vehicle operations at the study intersection with the addition of vehicle trips associated with the proposed project (Table 1). The Existing and Existing plus Project level of service for the study intersections are summarized in Table 3.

Second Approach	Control	AM Peak Hour		PM Peak Hour	
Scenario and Approach		LOS	Delay	LOS	Delay
Existing					
Westbound Commerce Drive	Stop	С	19.8	E	40.6
Eastbound Patterson Ranch Road	Stop	E	35.7	D	26.1
Existing plus Project					
Westbound Commerce Drive	Stop	С	21.1	E	40.9
Eastbound Patterson Ranch Road	Stop	E	38.8	D	26.2

Table 3 Existing Base and plus Project Conditions Intersection Level of Service

Under Existing conditions, eastbound Patterson Ranch Road operates at a level of service below the City's LOS "D" threshold during the morning peak hour, while westbound Commerce Drive operates at a deficient LOS during the afternoon peak hour. With the addition of the Projectgenerated traffic (five total trips in the morning peak hour and nine total trips in the afternoon peak hour), the delay per approach is forecast to increase by approximately three seconds at Patterson Ranch Road, and by less than one second at Commerce Drive. Under Existing and Existing plus Project conditions, the vehicles along Paseo Padre Parkway do not experience delay except when yielding to oncoming traffic when making a left turn.

Actual delays may be higher than those calculated by the Highway Capacity Manual. Vehicles turning left onto Paseo Padre Parkway from the minor street approaches must find gaps in two directions of traffic. This maneuver is particularly challenging when the intersecting traffic is traveling at high speed, since minor street vehicles need a larger time and space gap to clear the intersection and accelerate to the prevailing traffic speed. Vehicle traffic on Paseo Padre

Parkway has been observed traveling above the posted speed limit of 45 MPH. Vehicles unable to find a left-turning gap from the Patterson Ranch Road approach could turn right onto southbound Paseo Padre Parkway. The first opportunity to turn off Paseo Padre Parkway is at Kaiser Drive, a half mile to the south.

5.2 MULTIMODAL ACCESS ISSUES

The following section discusses the existing pedestrian and bicycle facilities at the study intersection, their consistency with the California Manual on Uniform Traffic Control Devices (CA MUTCD) design standards, and elements that would improve safety for all users.

PEDESTRIAN ACCESS

Walking is an increasingly popular way for people to visit Coyote Hills Park. Some park visitors park on Commerce Drive and walk across Paseo Padre Parkway into the park. Employees in the offices east of Paseo Padre Parkway reportedly walk to the Park for recreation throughout the day.

Crosswalks at the intersection of Patterson Ranch Road / Commerce Drive / Paseo Padre Parkway are delineated with transverse pavement markings, i.e., two parallel, 12-inch white lines. The crosswalks do not have pedestrian crossing warning signs in advance of the intersection and at the crossing itself. Although not required at all crosswalks by the CA MUTCD, pedestrian crossing warning signs are recommended at high-speed roadways with more than one lane in each direction. Flashing beacons are recommended when justified by pedestrian and vehicle traffic.

There are curb ramps at all four corners and overhead roadway lights at the northeast and southwest corners. The northeast and southeast corners (Commerce Drive approach) are configured with a channelized right turn lane and a Type C pedestrian passageway. The resulting corner curb radii with the right turn channels are approximately 60 feet. Large corner curb radii typically facilitate fast turns by vehicles.

There are no median refuges for pedestrians crossing Paseo Padre Parkway.

BICYCLE ACCESS

Bicycling to the Park is growing in popularity with the construction of the San Francisco Bay Trail extension. Bicyclists crossing Paseo Padre Parkway experience the same safety issues as pedestrians, as summarized in the previous section.

Along Paseo Padre Parkway, the northbound bike lane at Patterson Ranch Road / Commerce Drive discontinues approximately 280 feet in advance of the intersection. Where the bike lane is discontinued, there is a 150-foot section where a northbound right turn pocket begins. The unmarked area is the intended weaving area for northbound vehicles to cross the bikeway to enter the right turn pocket. The bikeway resumes approximately 130 feet from the intersection.

The northbound bike lane on Paseo Padre Parkway north of the study intersection runs for approximately 130 feet, and then discontinues again for approximately 140 feet; this unmarked area is the weaving area for westbound right turning vehicles to merge onto northbound Paseo Padre Parkway. In the southbound direction on Paseo Padre Parkway, the bike lanes continue up to the intersection and are demarcated with 200 feet of dashed striping.

The bike lanes on Patterson Ranch are generally designed consistently with California Manual on Uniform Traffic Control Devices (CA MUTCD) guidance on bike lanes and right turn pockets (Figure 9C-4). However, the design lacks both required and optional features that would improve the safety for bicyclists traveling next to high speed traffic (>45 MPH). Among the required elements, the northbound weaving areas lack a required sign, R4-4, "BEGIN RIGHT TURN LANE YIELD TO BIKES". Among the optional elements, there are no dashed lines, signs or markings to indicate to weaving traffic the presence of bicycle traffic. A shorter weaving distance, combined with additional pavement markings, could slow vehicle traffic making the weaving maneuver.

5.3 COLLISION HISTORY

Collision data retrieved from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) from 2007 to 2017 show seven collisions at this intersection over the past 11 years. Five collisions involved multiple vehicles, one collision involved a vehicle and bicyclist, and one involved one vehicle hitting a fixed object. Of the seven total collisions, five collisions were broadside collisions. All five collisions occurred between one vehicle on Paseo Padre Parkway and another attempting to turn onto or cross Paseo Padre Parkway from the minor street approaches. The single-vehicle collision was faulted to improper turning resulting in hitting a fixed object.

The bicycle collision occurred when a bicyclist crossing Paseo Padre Parkway was hit by a southbound vehicle on Paseo Padre Parkway. There are no recorded pedestrian collisions at the Patterson Ranch Road / Commerce Drive / Paseo Padre Parkway intersection.

5.4 VMT ANALYSIS

California Senate Bill 743 changed the State's guidelines on transportation-related environmental impacts from a level-of-service basis to Vehicle Miles Traveled. VMT measures the amount and distance people drive to a destination. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options.

The Governor's Office of Planning and Research (OPR) issued a technical advisory on how to apply VMT analysis.¹ The technical advisory does not specifically suggest a VMT threshold for parks, with most of the discussion oriented around residential, office and retail projects.

The most relevant guidance from the technical advisory is for small projects:

Screening Threshold for Small Projects Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

The proposed project is estimated to 70 additional daily trips (based on 14 combined AM and PM peak hour trips, and extrapolated by a factor of five), which indicates a less-than significant transportation impact per the Small Projects Screening Threshold.

The OPR guidance on retail uses is also applicable to the proposed project: Parks, like retail uses, typically redistribute recreation trips rather than creating new trips. By adding recreational opportunities into the urban fabric and thereby improving recreational destination proximity, local parks tend to shorten trips and reduce VMT. The project site provides and improves upon the connection to a regional multiuse trail, which allows for non-vehicular access.

For these reasons, the proposed project is not likely to cause a significant impact based on VMT.

¹ State of California, Governor's Office of Planning and Research. (April 2018) "Technical Advisory on Evaluating Transportation Impacts in CEQA." <u>http://opr.ca.gov/docs/20180416-</u> <u>743_Technical_Advisory_4.16.18.pdf</u>

6 Near-Term Base and plus Project Conditions

Future year vehicle traffic forecasts were derived from traffic forecasts reflecting the City of Fremont's General Plan build-out (2035).² The General Plan Traffic Impact Analysis's nearest direct traffic forecasts were for the Paseo Padre Parkway / Ardenwood Boulevard intersection. The traffic at the project study intersection was forecast using the arriving and departing traffic volumes along Paseo Padre Parkway and continuing these trips through the Patterson Ranch Road / Commerce Drive intersection.

Near-Term Base traffic forecasts were modeled by interpolation between the traffic count year (2017) and the build-out (2035) and applying eight years' growth to estimate year 2025 conditions (Figure 4). The Near-Term conditions are assumed to reflect the following projects in the project area that are either under construction or already entitled:

- Four office buildings on Campus Court entitled through the Ardenwood Technology Park Planned District Amendment
- 500 single-family residential lots and associated parks, trails, streets and utilities under construction on the Patterson Ranch Planned District project site
- The planned District Amendment for the Dumbarton Quarry Park

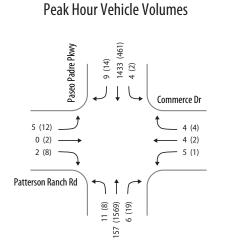
The Near-Term plus Project conditions added the proposed project traffic to the Near-Term Base forecasts. The Near-Term and Near-Term plus Project level of service are summarized in Table 4. The Level of Service calculations are provided in the appendix.

Scenario and Approach	Control	AM Pe	ak Hour	PM Peak Hour	
Scenario and Approach	Connor	LOS	Delay	LOS	Delay
Near-Term Base					
Westbound Commerce Drive	Stop	D	29.0	F	56.7
Eastbound Patterson Ranch Road	Stop	F	57.7	E	41.2
Near-Term plus Project					
Westbound Commerce Drive	Stop	D	31.3	F	57.3
Eastbound Patterson Ranch Road	Stop	F	64.6	E	42.1

Table 4 Near-Term	Base and plus Pro	piect Conditions Inter	section Level of Service
	i base ana pies i ie		

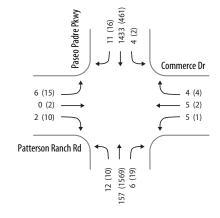
² <u>https://www.fremont.gov/DocumentCenter/View/5813/Appendix-B-web-version?bidld;</u> Appendix C.

Under Near-Term Base conditions and Near-Term plus project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS E or F during the commute peak hours due to increased through-traffic on Paseo Padre Parkway. The forecast delay at the Patterson Ranch Road approach increases by nearly 10 seconds between Near-Term Base and plus Project conditions.

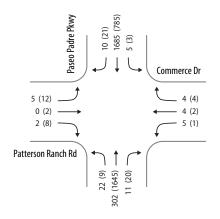


Near-Term Base

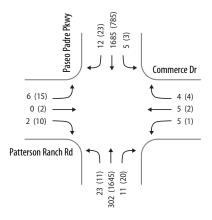




Cumulative Base Peak Hour Vehicle Volumes







LEGEND: xx AM (xx) PM

Coyote Hills Regional Park Expansion



7 Cumulative Base and plus Project Conditions

As noted in the previous section, Cumulative Base traffic forecasts for Paseo Padre Parkway were derived from adjacent forecasts at the Paseo Padre Parkway / Ardenwood Boulevard intersection. The Cumulative Base plus Project conditions added the proposed project traffic to the Cumulative Base conditions (Figure 4). The Cumulative Base and Cumulative plus Project level of service for the study intersections are summarized in Table 5. The Level of Service calculations are provided in the appendix.

Scongrig and Approach	Control	A.M. Peak Hour		P.M. Peak Hour	
Scenario and Approach	Connor	LOS	Delay	LOS	Delay
Cumulative Base					
Westbound Commerce Drive	Stop	F	54.7	F	101.5
Eastbound Patterson Ranch Road	Stop	F	124.3	F	97.3
Cumulative plus Project					
Westbound Commerce Drive	Stop	F	61.0	F	102.9
Eastbound Patterson Ranch Road	Stop	F	149.7	F	105.3

Table 5 Cumulative Base and plus Project Conditions Intersection Level of Service

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. The forecast delay at the Patterson Ranch Road approach increases by 25 seconds between Cumulative Base and plus Project conditions.

8 Summary of Impacts and Recommended Improvements

The following section summarizes the deficiencies identified in the traffic analysis and recommends improvements that would mitigate these conditions.

8.1 PROJECT IMPACT

The Patterson Ranch and Commerce Drive approaches at the study intersection are estimated to operate at a deficient LOS, beginning under Existing conditions (LOS "E"), and getting progressively worse with vehicle traffic growth through year 2035 (LOS "F"). Although the delays forecast under Cumulative plus Project conditions at Patterson Ranch Road appear to be extreme, they affect a relatively small number of vehicles (approximately 30 in the peak hour) compared to the through-traffic on Paseo Padre Parkway (approximately 1500 in the peak hour). Under Cumulative plus Project conditions, the project would account for less than one percent of AM peak hour traffic growth (0.7% = 5 / (2060-1329)) and slightly more than one percent (1.3% = 9 / (2521-1816)) of PM peak hour volume growth, or one percent on average.³

The project would add bicycle and pedestrian traffic to the study intersection. Future peak hour bicycle and pedestrian volumes were not forecast because demand is uncertain during the weekday commute peak hour. The proposed estimate of project impact is the percent vehicle traffic impact, or one percent of the projected growth through General Plan build-out.

The City of Fremont's LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized and unsignalized intersections. The project has a potential significant impact because traffic generated by the project would add vehicle traffic to an intersection operating below the City's threshold for acceptable operations. The proposed mitigation for project impact is the project's fair share contribution of one percent toward improvements that would improve access, as described below.

8.2 POTENTIAL VEHICULAR CIRCULATION IMPROVEMENTS

The California Manual on Uniform Traffic Control Devices (CA MUTCD) provides guidance on when conditions justify traffic signals. These studies, or "signal warrants", consider the "traffic conditions, pedestrian characteristics, and physical characteristics of the location... to determine whether installation of a traffic control signal is justified at a particular location" (§4C.01). The analyses for applicable traffic signal warrants and pedestrian beacon warrant are presented in the appendix.

³ Project Contribution = Project Volume / ((Cumulative + Project Volume) – (Existing Volume))

None of the applicable traffic control signal warrants (1, 2, 3 and 4) were met, meaning traffic control signals are not warranted at this intersection. However, the pedestrian hybrid beacon warrant in the CA MUCD was met using counts observed from Saturday, June 24, 2017. Thus, a pedestrian hybrid beacon may be warranted at this intersection, and if considered, should conform to all standards and guidance provided in Chapter 4F of the CA MUTCD.

Mitigation Measure 1, Vehicle Access: To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City should institute "Right Turn Only" from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. The forecast operations at eastbound Patterson Ranch with the right-turn only requirement are presented in Table 6 Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping and raised curbs may be needed to reinforce the right-turn only requirement. The project should contribute its fair share toward to cost of the improvement (one percent).

Table 6 Cumulative plus Project Conditions Intersection Level of Service with Mitigation Measure

Scenario and Approach	Control	A.M. Pe	eak Hour	P.M. Peak Hour	
scendrio and Approach	Connor	LOS	Delay	LOS	Delay
Cumulative plus Project					
Westbound Commerce Drive	Stop	F	61.0	F	102.9
Eastbound Patterson Ranch	Stop,	C	18.7	В	11.7
Road	Right Turn Only	C	10.7	D	11.7

Note: No improvements proposed for Westbound Commerce Drive (existing condition).

The Right Turn Only requirement should be instituted in addition to the recommended bicycle and pedestrian improvements described below.

8.3 POTENTIAL PEDESTRIAN & BICYCLE CIRCULATION IMPROVEMENTS

Deficiencies in the pedestrian and bicycle environment were summarized in section 5.2 of this report.

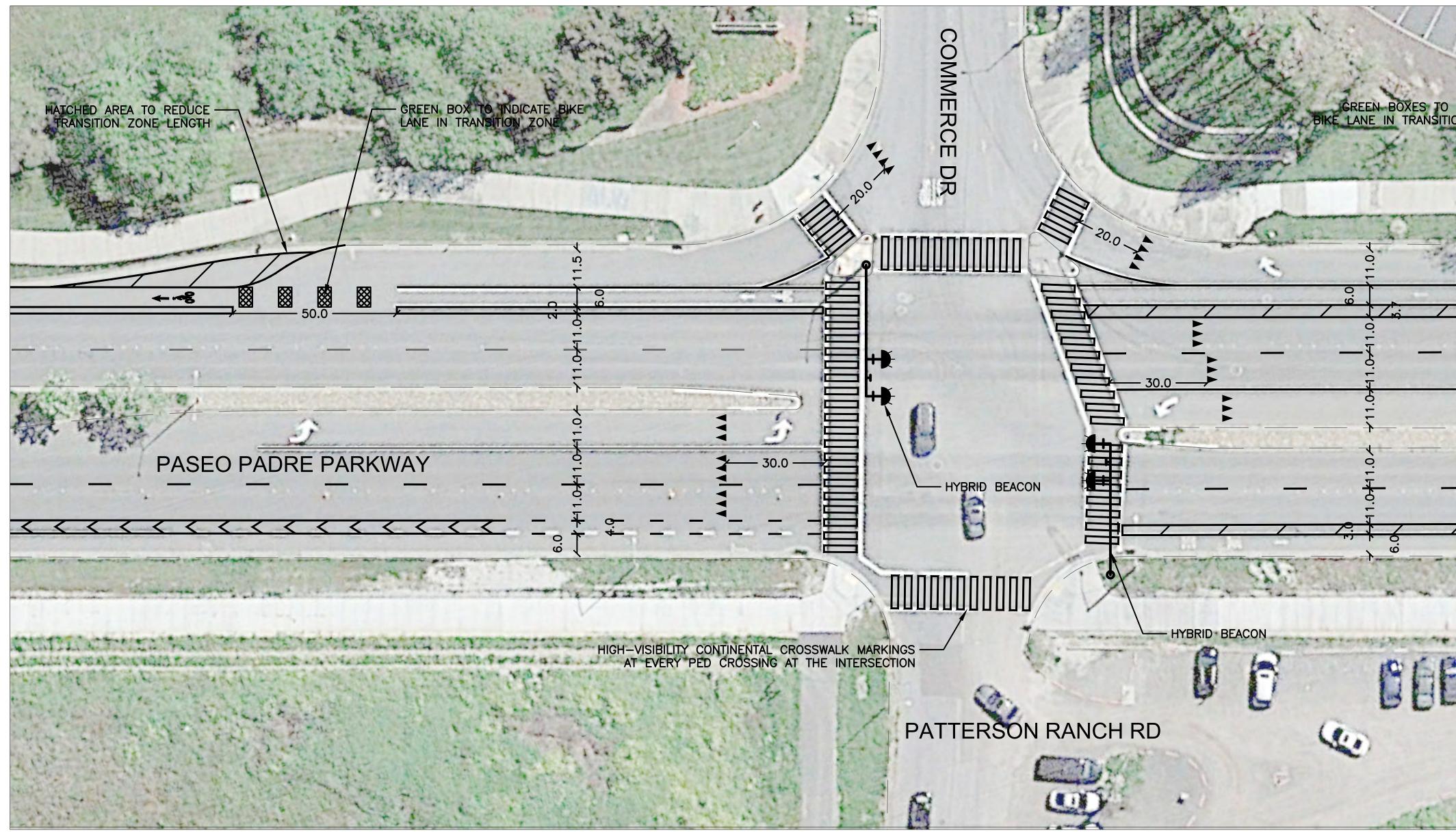
Mitigation Measure 2, Bicycle and Pedestrian Access: The following improvements would improve the pedestrian and bicycle access across Paseo Padre Parkway, and are illustrated Figure 5:

- Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet.
- Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles.
- Shorten the northbound right turn weaving area to slow vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone.

- Install Additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks.
- Upgrade the crosswalks from transverse markings (two white lines) to continental markings.
- Add yield lines 30 feet in advance of the crosswalks.
- Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway.

The project should contribute its fair share toward to cost of the improvement (one percent).

The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future.



CONCEPTUAL PLAN

Paris TRANSPORTATION CONSULTING

MW

MW

1750 Bridgeway, Suite B208 Sausalito, CA 94965 (415) 649-6000

AL

AL

APPROVED:

EAST BAY REGIONAL PARKS DISTRICT COYOTE HILLS REGIONAL PARK EIR COYOTE HILLS/PASEO PADRE PARKWAY SAFETY IMPROVEMENTS

CONCEPTUAL PLAN SCALE: 1" = 20'

INDICATE ON ZONE					
			Y	7	
10	Ô	e			1-22.00
				20'	40'

	REVISIONS	date 07/09/2018	SCALE 1" = 20'
		PTC PROJECT NO. 17	003
			-1
		SHEET NO.	
<u>∕1∖</u> NO.	DESCRIPTION	1 C	F 1



Appendix A: Existing Traffic Counts

Appendix B: Collision Records

Collision Details for: Case ID 4676962

Collision Information

Date & Time (M/D/Y HH:MM)

Dist. & Dir. from Intersection

Location (Intersection)

State Highway

County

City

Parties: 2

Alameda	Party		Statewide	At	Party	Movement Preceding
Fremont	Number	Party Type	Vehicle Type	Fault	Direction	Collision
04/24/2010 11:08	t	1 - Driver (including Hit and Run)	A - Passenger	Yes	North	B - Proceeding Straight
Paseo Padre Pkwy & Commerce Dr			Car/Station Wagon			
0.00 ft East	2	1 - Driver (including Hit and Run)	A - Passenger	No	East	B - Proceeding Straight
No			Car/Station Wagon			
37.55551499, -122.06733309						
	Victim	s. 4				

VI	C	tı	m	s:	1

Latidude & Longitude		37.55551499, -122.06733309				
Type of Collision			C - Other Motor Vehicle			
Collision Severity	4 - Injury (Complain of Pain)	Pedestiran Accident	No			
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No			
Weather	A - Clear	Motorcycle Accident	No			
Alcohol Involved	No	Truck Accident	No			

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	56	4 - Complaint of Pain
t	2 - Passenger	F - Female	52	4 - Complaint of Pain
2	1 - Driver	F - Female	62	4 - Complaint of Pain
2	2 - Passenger	M - Male	70	4 - Complaint of Pain

Collision Details for: Case ID 7204707

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	02/15/2016 16:51
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latidude & Longitude	37.55549991, -122.06732991

Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle
Collision Severity	3 - Injury (Other Visible)	Pedestiran Accident	No
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No
Weather	A - Clear	Motorcycle Accident	No
Alcohol Involved	No	Truck Accident	No

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	West	B - Proceeding Straight

Victims: 4

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	64	4 - Complaint of Pain
2	1 - Driver	F - Female	21	3 - Other Visible Injury
2	2 - Passenger	F - Female	16	4 - Complaint of Pain
2	2 - Passenger	F - Female	1	0 - No Injury

Collision Details for: Case ID 6953387

County		Alameda				
City		Fremont				
Date & Time (M/D	/Y HH:MM)	05/15/2015 15:57				
Location (Intersed	tion)	Paseo Padre Pkwy & Commerce Dr				
Dist. & Dir. from I	ntersection	0.00 ft East				
State Highway		No				
Latidude & Longitude		37,55549991, -122.06732991				
Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle			
Collision Severity	3 - Injury (Other Visible)	Pedestiran Accident	No			
PCF Violation Category	03 - Unsafe Speed	Bicycle Accident	No			
Weather	A - Clear	Motorcycle Accident	No			
Alcohol Involved	No	Truck Accident	No			

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	West	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight
3	3 - Parked Vehicle	A - Passenger Car/Station Wagon	No	South	O - Parked

Victims: 3

Parties: 3

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	19	4 - Complaint of Pain
2	1 - Driver	F - Female	29	3 - Other Visible Injury
2	2 - Passenger	M - Male	30	4 - Complaint of Pain

Collision Details for: Case ID 8164767

Collision Information

County		A	Alameda				
City			Fremont				
Date & Time (M/D/	Y HH:MM)	1	0/29/2016 21:32				
Location (Intersect	ion)	P	aseo Padre Pkwy & Commer	ce Dr			
Dist. & Dir. from In	tersection	0	.00 ft East				
State Highway		No					
Latidude & Longitude		37.55549991, -122.06732991					
Type of Collision	E - Hit Object		Motor Vehicle Involved With	l - Fixed Object			
Collision Severity	3 - Injury (Oth Visible)	er	Pedestiran Accident	No			
PCF Violation Category	08 - Improper Turning		Bicycle Accident	No			
Weather	B - Cloudy		Motorcycle Accident	No			
Alcohol Involved	Yes		Truck Accident	No			

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight

Victims: 1

Party	Victim	Victim	Victim	Victim Degree of
Number	Role	Gender	Age	Injury
1	1 - Driver	M - Male	24	3 - Other Visible Injury

Collision Details for: Case ID 8069144

Collision Information

Parties: 2

County		Alamed	da				
City			nt				
Date & Time (M/D/	ү нн:мм)	06/13/2	2016 09:54				
Location (Intersect	ion)	Paseo F	Padre Pkwy & Commerce D)r			
Dist. & Dir. from Intersection 0.00 ft E) ft East				
State Highway No			No				
Latidude & Longitu	de	37.555	49991, -122,06732991				
Type of Collision	the address		Motor Vehicle Involved With	G - Bicycle			
Collision Severity	3 - Injury (Oth	ner Visible)	Pedestiran Accident	No			
PCF Violation Category	09 - Automobile Right of Way		Bicycle Accident	Yes			
Weather	A - Clear		Motorcycle Accident	No			
Alcohol Involved	No		Truck Accident	No			

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	4 - Bicyclist	L - Bicycle	Yes	East	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	South	L - Entering Traffic

Victims: 1

Party	Victim	Victim	Victim	Victim Degree of
Number	Role	Gender	Age	Injury
1	4 - Bicyclist	M - Male	60	3 - Other Visible Injury

Collision Details for: Case ID 8363570

Motorcycle

Truck Accident

Accident

Yes

No

Collision Information

Parties: 2

County		Alameda	Party			Statewide Vehicle		Party	Movemen						
City		Fremont		Number	Party Type	Туре	Fault	Direction	Collision						
Date & Time (M/D/Y HH:MM) 05/04/2017		05/04/2017 08:26	05/04/2017 08:26		1 - Driver	C-	Yes	East	E - Making						
Location (Inters	section)	Paseo Padre Pkwy & Con	nmerce Dr	(including Hit and Run)		lit Motorcycle/Scooter			Left Turn						
Dist. & Dir. from	n Intersection	0.00 ft East		2 1 - Driver								A - Passenger	No	North	в-
State Highway		No		(including l and Run)	(including Hit and Run)	Car/Station Wago	1		Proceeding Straight						
Latidude & Lon	atidude & Longitude 37.55549991, -122.06732991		2991		-										
				Victim	5:2										
Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle	Party Number	Victim Role		/ictim Age	Victim De Injury	egree of						
Collision Severity	3 - Injury (Other Visible)	Pedestiran Accident	No	1	1 - Driver	M - Male	38	3 - Other	Visible Injur						
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No	2	1 - Driver	M - Male	14	3 - Other	Visible Injur						
	1.65														

Weather

Alcohol

Involved

A - Clear

No

Collision Details for: Case ID 8021729

Collision Information

D - Broadside

3 - Injury (Other

09 - Automobile

Right of Way

A - Clear

No

Visible)

Type of

Collision

Collision

Severity

Category

Weather

Alcohol

Involved

PCF Violation

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	04/03/2016 15:56
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latidude & Longitude	37.55549991, -122.06732991

Motor Vehicle

Involved With

Bicycle Accident

Motorcycle

Truck Accident

Accident

Pedestiran Accident No

C - Other Motor

Vehicle

No

No

No

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	West	B - Proceeding Straight

Victims: 1

Party	Victim	Victim	Victim	Victim Degree of
Number	Role	Gender	Age	Injury
2	1 - Driver	M - Male	51	3 - Other Visible Injury

Appendix C: LOS Worksheets

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

	٦	-	\mathbf{r}	•	←	•	1	Ť	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	<u></u>	1	۲.	A			\$			4	
Traffic Volume (veh/h)	4	55	2	3	1237	8	5	4	4	5	0	2
Future Volume (Veh/h)	4	55	2	3	1237	8	5	4	4	5	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	60	2	3	1345	9	5	4	4	5	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1354			60			748	1428	30	1396	1424	677
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1354			60			748	1428	30	1396	1424	677
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	97	100	95	100	99
cM capacity (veh/h)	504			1542			297	133	1038	97	133	395
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	4	30	30	2	3	897	457	13	7			
Volume Left	4	0	0	0	3	0	0	5	5			
Volume Right	0	0	0	2	0	0	9	4	2			
cSH	504	1700	1700	1700	1542	1700	1700	256	124			
Volume to Capacity	0.01	0.02	0.02	0.00	0.00	0.53	0.27	0.05	0.06			
Queue Length 95th (ft)	1	0	0	0	0	0	0	4	4			
Control Delay (s)	12.2	0.0	0.0	0.0	7.3	0.0	0.0	19.8	35.7			
Lane LOS	В				А			С	E			
Approach Delay (s)	0.7				0.0			19.8	35.7			
Approach LOS								С	E			
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utiliza	ation		44.4%	IC	CU Level	of Service			А			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

	٦	-	\mathbf{F}	4	←	•	•	Ť	1	1	Ļ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	††	1	ľ	↑ ĵ≽			\$			\$	
Traffic Volume (veh/h)	5	55	2	3	1237	10	5	5	4	6	0	2
Future Volume (Veh/h)	5	55	2	3	1237	10	5	5	4	6	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	60	2	3	1345	11	5	5	4	7	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1356			60			750	1432	30	1399	1426	678
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1356			60			750	1432	30	1399	1426	678
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	96	100	93	100	99
cM capacity (veh/h)	503			1542			296	132	1038	96	133	395
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	5	30	30	2	3	897	459	14	9			
Volume Left	5	0	0	0	3	0	0	5	7			
Volume Right	0	0	0	2	0	0	11	4	2			
cSH	503	1700	1700	1700	1542	1700	1700	238	115			
Volume to Capacity	0.01	0.02	0.02	0.00	0.00	0.53	0.27	0.06	0.08			
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	6			
Control Delay (s)	12.2	0.0	0.0	0.0	7.3	0.0	0.0	21.1	38.8			
Lane LOS	В				А			С	E			
Approach Delay (s)	0.9				0.0			21.1	38.8			
Approach LOS								С	E			
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utiliza	ation		44.5%	IC	CU Level o	of Service			А			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	††	1	٦	∱1 ≱			4			4	
Traffic Volume (veh/h)	8	1516	18	1	237	7	1	2	4	12	2	8
Future Volume (Veh/h)	8	1516	18	1	237	7	1	2	4	12	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	1648	20	1	258	8	1	2	4	13	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	266			1648			1807	1934	824	1107	1930	133
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	266			1648			1807	1934	824	1107	1930	133
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	97	99	92	97	99
cM capacity (veh/h)	1295			388			48	65	316	158	65	892
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	9	824	824	20	1	172	94	7	24			
Volume Left	9	0	0	0	1	0	0	1	13			
Volume Right	0	0	0	20	0	0	8	4	9			
cSH	1295	1700	1700	1700	388	1700	1700	108	195			
Volume to Capacity	0.01	0.48	0.48	0.01	0.00	0.10	0.06	0.06	0.12			
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	10			
Control Delay (s)	7.8	0.0	0.0	0.0	14.3	0.0	0.0	40.6	26.1			
Lane LOS	А				В			E	D			
Approach Delay (s)	0.0				0.1			40.6	26.1			
Approach LOS								E	D			
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utiliza	ation		52.1%	IC	CU Level	of Service			А			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	<u></u>	1	۲	∱ ⊅			4			4	
Traffic Volume (veh/h)	10	1516	18	1	237	9	1	2	4	15	2	10
Future Volume (Veh/h)	10	1516	18	1	237	9	1	2	4	15	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	1648	20	1	258	10	1	2	4	16	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	268			1648			1813	1940	824	1112	1935	134
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	268			1648			1813	1940	824	1112	1935	134
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	97	99	90	97	99
cM capacity (veh/h)	1293			388			47	64	316	156	64	890
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	11	824	824	20	1	172	96	7	29			
Volume Left	11	0	0	0	1	0	0	1	16			
Volume Right	0	0	0	20	0	0	10	4	11			
cSH	1293	1700	1700	1700	388	1700	1700	107	199			
Volume to Capacity	0.01	0.48	0.48	0.01	0.00	0.10	0.06	0.07	0.15			
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	13			
Control Delay (s)	7.8	0.0	0.0	0.0	14.3	0.0	0.0	40.9	26.2			
Lane LOS	А				В			E	D			
Approach Delay (s)	0.1				0.1			40.9	26.2			
Approach LOS								E	D			
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utiliza	ition		53.0%	IC	CU Level	of Service			А			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

MovementEBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBTSBRLane ConfigurationsImage: state of the state
Traffic Volume (veh/h) 11 157 6 4 1433 9 5 4 4 5 0 2 Future Volume (Veh/h) 11 157 6 4 1433 9 5 4 4 5 0 2 Sign Control Free Free Stop Stop Stop Stop
Traffic Volume (veh/h) 11 157 6 4 1433 9 5 4 4 5 0 2 Future Volume (Veh/h) 11 157 6 4 1433 9 5 4 4 5 0 2 Sign Control Free Free Stop Stop Stop Stop
Sign Control Free Free Stop Stop
Grade 0% 0% 0%
Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
Hourly flow rate (vph) 12 171 7 4 1558 10 5 4 4 5 0 2
Pedestrians
Lane Width (ft)
Walking Speed (ft/s)
Percent Blockage
Right turn flare (veh)
Median type None None
Median storage veh)
Upstream signal (ft)
pX, platoon unblocked
vC, conflicting volume 1568 171 984 1771 86 1682 1766 784
vC1, stage 1 conf vol
vC2, stage 2 conf vol
vCu, unblocked vol 1568 171 984 1771 86 1682 1766 784
tC, single (s) 4.1 4.1 7.5 6.5 6.9 7.5 6.5 6.9
tC, 2 stage (s)
tF (s) 2.2 2.2 3.5 4.0 3.3 3.5 4.0 3.3
p0 queue free % 97 100 97 95 100 91 100 99
cM capacity (veh/h)4171404197809565780336
Direction, Lane # EB 1 EB 2 EB 3 EB 4 WB 1 WB 2 WB 3 NB 1 SB 1
Volume Total 12 86 86 7 4 1039 529 13 7
Volume Left 12 0 0 0 4 0 0 5 5
Volume Right 0 0 0 7 0 0 10 4 2
cSH 417 1700 1700 1700 1404 1700 163 75
Volume to Capacity 0.03 0.05 0.05 0.00 0.00 0.61 0.31 0.08 0.09
Queue Length 95th (ft) 2 0 0 0 0 0 6 7
Control Delay (s) 13.9 0.0 0.0 0.0 7.6 0.0 0.0 29.0 57.7
Lane LOS B A D F
Approach Delay (s) 0.9 0.0 29.0 57.7
Approach LOS D F
Intersection Summary
Average Delay 0.5
Intersection Capacity Utilization 49.9% ICU Level of Service A
Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	<u></u>	1	٦	A			4			\$	
Traffic Volume (veh/h)	12	157	6	4	1433	11	5	5	4	6	0	2
Future Volume (Veh/h)	12	157	6	4	1433	11	5	5	4	6	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	171	7	4	1558	12	5	5	4	7	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1570			171			986	1775	86	1686	1769	785
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1570			171			986	1775	86	1686	1769	785
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			97	94	100	88	100	99
cM capacity (veh/h)	416			1404			196	79	956	56	80	336
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	13	86	86	7	4	1039	531	14	9			
Volume Left	13	0	0	0	4	0	0	5	7			
Volume Right	0	0	0	7	0	0	12	4	2			
cSH	416	1700	1700	1700	1404	1700	1700	151	69			
Volume to Capacity	0.03	0.05	0.05	0.00	0.00	0.61	0.31	0.09	0.13			
Queue Length 95th (ft)	2	0	0.00	0	0	0	0	8	11			
Control Delay (s)	13.9	0.0	0.0	0.0	7.6	0.0	0.0	31.3	64.6			
Lane LOS	B	0.0	0.0	0.0	A	0.0	0.0	D	F			
Approach Delay (s)	0.9				0.0			31.3	64.6			
Approach LOS	0.7				0.0			D	F			
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utiliza	ation		50.0%			of Service			А			
Analysis Period (min)			15						~~~~			

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u>†</u> †	1	ľ	↑ ĵ≽			\$			\$	
Traffic Volume (veh/h)	8	1569	19	2	461	14	1	2	4	12	2	8
Future Volume (Veh/h)	8	1569	19	2	461	14	1	2	4	12	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	1705	21	2	501	15	1	2	4	13	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	516			1705			1988	2243	852	1384	2236	258
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	516			1705			1988	2243	852	1384	2236	258
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	95	99	87	95	99
cM capacity (veh/h)	1046			369			34	41	303	97	41	741
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	9	852	852	21	2	334	182	7	24			
Volume Left	9	0	0	0	2	0	0	1	13			
Volume Right	0	0	0	21	0	0	15	4	9			
cSH	1046	1700	1700	1700	369	1700	1700	77	123			
Volume to Capacity	0.01	0.50	0.50	0.01	0.01	0.20	0.11	0.09	0.19			
Queue Length 95th (ft)	1	0	0	0	0	0	0	7	17			
Control Delay (s)	8.5	0.0	0.0	0.0	14.8	0.0	0.0	56.7	41.2			
Lane LOS	А				В			F	E			
Approach Delay (s)	0.0				0.1			56.7	41.2			
Approach LOS								F	E			
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utiliza	tion		53.6%	IC	CU Level of	of Service			А			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦ ۲	<u></u>	1	ľ	∱1 ≱			\$			\$	
Traffic Volume (veh/h)	10	1569	19	2	461	16	1	2	4	15	2	10
Future Volume (Veh/h)	10	1569	19	2	461	16	1	2	4	15	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	1705	21	2	501	17	1	2	4	16	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	518			1705			1994	2249	852	1389	2240	259
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	518			1705			1994	2249	852	1389	2240	259
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	95	99	83	95	99
cM capacity (veh/h)	1044			369			33	40	303	96	41	740
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	11	852	852	21	2	334	184	7	29			
Volume Left	11	0	0	0	2	0	0	1	16			
Volume Right	0	0	0	21	0	0	17	4	11			
cSH	1044	1700	1700	1700	369	1700	1700	76	126			
Volume to Capacity	0.01	0.50	0.50	0.01	0.01	0.20	0.11	0.09	0.23			
Queue Length 95th (ft)	1	0	0	0	0	0	0	7	21			
Control Delay (s)	8.5	0.0	0.0	0.0	14.8	0.0	0.0	57.3	42.1			
Lane LOS	А				В			F	Е			
Approach Delay (s)	0.1				0.1			57.3	42.1			
Approach LOS								F	Е			
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utiliza	ation		54.5%	IC	U Level	of Service			А			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/12/2018

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲. ۲	<u></u>	1	ľ	∱ î,			\$			\$	
Traffic Volume (veh/h)	23	302	11	5	1685	12	5	5	4	6	0	2
Future Volume (Veh/h)	23	302	11	5	1685	12	5	5	4	6	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	328	12	5	1832	13	5	5	4	7	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1845			328			1306	2233	164	2065	2226	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1845			328			1306	2233	164	2065	2226	922
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			100			95	87	100	74	100	99
cM capacity (veh/h)	325			1228			109	39	852	27	39	272
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	25	164	164	12	5	1221	624	14	9			
Volume Left	25	0	0	0	5	0	0	5	7			
Volume Right	0	0	0	12	0	0	13	4	2			
cSH	325	1700	1700	1700	1228	1700	1700	78	33			
Volume to Capacity	0.08	0.10	0.10	0.01	0.00	0.72	0.37	0.18	0.27			
Queue Length 95th (ft)	6	0	0	0	0	0	0	15	22			
Control Delay (s)	17.0	0.0	0.0	0.0	7.9	0.0	0.0	61.0	149.7			
Lane LOS	С				А			F	F			
Approach Delay (s)	1.2				0.0			61.0	149.7			
Approach LOS								F	F			
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utiliza	ation		57.0%	IC	U Level	of Service			В			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	† †	1	۲.	∱ ⊅			\$			\$	
Traffic Volume (veh/h)	22	302	11	5	1685	10	5	4	4	5	0	2
Future Volume (Veh/h)	22	302	11	5	1685	10	5	4	4	5	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	328	12	5	1832	11	5	4	4	5	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1843			328			1304	2229	164	2062	2224	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1843			328			1304	2229	164	2062	2224	922
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			100			95	90	100	82	100	99
cM capacity (veh/h)	326			1228			110	39	852	27	39	272
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	24	164	164	12	5	1221	622	13	7			
Volume Left	24	0	0	0	5	0	0	5	5			
Volume Right	0	0	0	12	0	0	11	4	2			
cSH	326	1700	1700	1700	1228	1700	1700	85	37			
Volume to Capacity	0.07	0.10	0.10	0.01	0.00	0.72	0.37	0.15	0.19			
Queue Length 95th (ft)	6	0	0	0	0	0	0	13	15			
Control Delay (s)	16.9	0.0	0.0	0.0	7.9	0.0	0.0	54.7	124.3			
Lane LOS	С				А			F	F			
Approach Delay (s)	1.1				0.0			54.7	124.3			
Approach LOS								F	F			
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization	tion		56.9%	IC	CU Level o	of Service			В			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲. ۲	<u></u>	1	ľ	↑ Ъ			\$			\$	
Traffic Volume (veh/h)	11	1645	20	3	785	23	1	2	4	15	2	10
Future Volume (Veh/h)	11	1645	20	3	785	23	1	2	4	15	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	1788	22	3	853	25	1	2	4	16	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	878			1788			2256	2696	894	1790	2684	439
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	878			1788			2256	2696	894	1790	2684	439
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			95	90	99	65	90	98
cM capacity (veh/h)	765			342			20	21	284	46	21	566
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	12	894	894	22	3	569	309	7	29			
Volume Left	12	0	0	0	3	0	0	1	16			
Volume Right	0	0	0	22	0	0	25	4	11			
cSH	765	1700	1700	1700	342	1700	1700	44	62			
Volume to Capacity	0.02	0.53	0.53	0.01	0.01	0.33	0.18	0.16	0.46			
Queue Length 95th (ft)	1	0	0	0	1	0	0	13	45			
Control Delay (s)	9.8	0.0	0.0	0.0	15.6	0.0	0.0	102.9	105.3			
Lane LOS	А				С			F	F			
Approach Delay (s)	0.1				0.1			102.9	105.3			
Approach LOS								F	F			
Intersection Summary												
Average Delay			1.4									
Intersection Capacity Utiliza	ation		56.6%	IC	CU Level o	of Service			В			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<u></u>	1	ľ	∱1 ≱			\$			\$	
Traffic Volume (veh/h)	9	1645	20	3	785	21	1	2	4	12	2	8
Future Volume (Veh/h)	9	1645	20	3	785	21	1	2	4	12	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	1788	22	3	853	23	1	2	4	13	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	876			1788			2250	2690	894	1786	2678	438
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	876			1788			2250	2690	894	1786	2678	438
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			95	90	99	72	91	98
cM capacity (veh/h)	766			342			20	21	284	46	21	567
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	10	894	894	22	3	569	307	7	24			
Volume Left	10	0	0	0	3	0	0	1	13			
Volume Right	0	0	0	22	0	0	23	4	9			
cSH	766	1700	1700	1700	342	1700	1700	44	61			
Volume to Capacity	0.01	0.53	0.53	0.01	0.01	0.33	0.18	0.16	0.39			
Queue Length 95th (ft)	1	0	0	0	1	0	0	13	37			
Control Delay (s)	9.8	0.0	0.0	0.0	15.6	0.0	0.0	101.5	97.3			
Lane LOS	А				С			F	F			
Approach Delay (s)	0.1				0.1			101.5	97.3			
Approach LOS								F	F			
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utiliza	ition		55.7%	IC	CU Level	of Service			В			
Analysis Period (min)			15									

HCM Unsignalized 1: Commerce Dr /P			•			dre Pkv	vv				02/0	7/2019
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	5	<u>†</u> †	1	٦	A			4			4	
Traffic Volume (veh/h)	23	302	11	5	1685	12	5	5	4	0	0	8
Future Volume (Veh/h)	23	302	11	5	1685	12	5	5	4	0	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	328	12	5	1832	13	5	5	4	0	0	9
Pedestrians												
Lane Width (ft)						Eas	tbound	d Patte	rson			
Walking Speed (ft/s)						Ran	ch Ro	ad app	roach			
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1845			328			1313	2233	164	2065	2226	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol	1045			220			1010	0000	1/4	2015	0007	000
vCu, unblocked vol	1845			328			1313	2233	164	2065	2226	922
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)	2.2			2.2			2 5	4.0	2.2	3.5	4.0	2.2
tF (s) p0 queue free %	2.2 92			100			3.5 95	4.0 87	3.3 100	3.5 100	4.0 100	3.3 97
cM capacity (veh/h)	325			1228			95 105	39	852	27	39	272
				1220			105	39	002	21	39	212
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	25	164	164	12	5	1221	624	14	9			
Volume Left	25	0	0	0	5	0	0	5	0			
Volume Right	0	0	0	12	0	0	13	4	9			
cSH	325	1700	1700	1700	1228	1700	1700	77	272			
Volume to Capacity	0.08	0.10	0.10	0.01	0.00	0.72	0.37	0.18	0.03			
Queue Length 95th (ft)	6	0	0	0	0	0	0	15	3			
Control Delay (s)	17.0	0.0	0.0	0.0	7.9	0.0	0.0	61.7	18.7			
Lane LOS	C				A			F	C			
Approach Delay (s)	1.2				0.0			61.7	18.7			
Approach LOS								F	С			
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilizat	tion		58.8%	IC	U Level o	of Service			В			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

02/07/2019	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲ ۲	<u>††</u>	1	ľ	∱ î,			\$			\$	
Traffic Volume (veh/h)	11	1645	20	3	785	23	1	2	4	0	0	27
Future Volume (Veh/h)	11	1645	20	3	785	23	1	2	4	0	0	27
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	1788	22	3	853	25	1	2	4	0	0	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)						East	tbound	l Patte	rson			
Percent Blockage						Ran	ch Ro	ad app	roach			
Right turn flare (veh)						- I tan		uu upp	100011			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	878			1788			2274	2696	894	1790	2684	439
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	878			1788			2274	2696	894	1790	2684	439
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			95	90	99	100	100	95
cM capacity (veh/h)	765			342			20	21	284	46	21	566
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	12	894	894	22	3	569	309	7	29			
Volume Left	12	0	0	0	3	0	0	1	0			
Volume Right	0	0	0	22	0	0	25	4	29			
cSH	765	1700	1700	1700	342	1700	1700	44	566			
Volume to Capacity	0.02	0.53	0.53	0.01	0.01	0.33	0.18	0.16	0.05			
Queue Length 95th (ft)	1	0	0	0	1	0	0	13	4			
Control Delay (s)	9.8	0.0	0.0	0.0	15.6	0.0	0.0	102.5	11.7			
Lane LOS	А				С			F	В			
Approach Delay (s)	0.1				0.1			102.5	11.7			
Approach LOS								F	В			
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utiliz	ation		55.5%	IC	CU Level	of Service			В			
Analysis Period (min)			15									

Appendix D: Traffic Signal Warrant Analysis

June 23,	Paseo Padre	Patterson			Warrant 1 Eight-Hour			
2017 Hour Starting	Parkway (Major) 2-way Total	Ranch Road (Minor 1)	Commerce Drive (Minor 2)	Condition A Satisfied? (70%)	Condition B Satisfied? (70%)	Both Condition A and B Satisfied? (56%)	Warrant 2 Four-Hour	
6:00 AM	1007	4	6	No	No	No	No	
7:00 AM	1320	4	8	No	No	No	No	
8:00 AM	1203	11	16	No	No	No	No	
9:00 AM	878	19	16	No	No	No	No	
10:00 AM	474	23	17	No	No	No	No	
11:00 AM	367	20	7	No	No	No	No	
12:00 PM	425	19	13	No	No	No	No	
1:00 PM	534	13	17	No	No	No	No	
2:00 PM	858	10	6	No	No	No	No	
3:00 PM	1438	12	8	No	No	No	No	
4:00 PM	1702	16	9	No	No	No	No	
5:00 PM	1724	9	10	No	No	No	No	
6:00 PM	1512	15	14	No	No	No	No	
7:00 PM	788	23	13	No	No	No	No	
8:00 PM	422	19	12	No	No	No	No	
	Warran	t Satisfied?		N	lo	No	No	

Counts from Friday, June 23, 2017.

Warrant 3 is automatically not satisfied if traffic volumes fail to satisfy Warrant 1 or 2 for a single peak hour.

	Paseo				Warrant 1 Eight-Hour			
June 24, 2017 Hour Starting	Padre Parkway (Major) 2-way Total	Patterson Ranch Road (Minor 1)	Commerce Drive (Minor 2)	Condition A Satisfied? (70%)	Condition B Satisfied? (70%)	Both Condition A and B Satisfied? (56%)	Warrant 2 Four-Hour	
10:00 AM	375	37	20	No	No	No	No	
11:00 AM	395	47	10	No	No	No	No	
12:00 PM	477	29	5	No	No	No	No	
1:00 PM	538	28	14	No	No	No	No	
2:00 PM	555	20	16	No	No	No	No	
3:00 PM	509	23	11	No	No	No	No	
4:00 PM	538	21	11	No	No	No	No	
5:00 PM	488	25	14	No	No	No	No	
6:00 PM	459	25	11	No	No	No	No	
7:00 PM	334	37	7	No	No	No	No	
	Warran	t Satisfied?	•	N	lo	No	No	

Table A2: Warrant 1 & 2, Paseo Padre Parkway ,	/ Patterson Ranch Road / Commerce Drive
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Counts from Saturday, June 24, 2017.

Warrant 3 is automatically not satisfied if traffic volumes fail to satisfy Warrant 1 or 2 for a single peak hour.

Table A3: Warrant 4 (Condition A), Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive

	Paseo Padre Parky (Major) Total of All Crossir	Warrant 4 Condition A: Pedestrian Four-Hour			
Hour Starting	Pedestrian Crossing June 23, 2017	Pedestrian Crossing June 24, 2017	Condition A Satisfied? (70%)	Condition B Satisfied? (70%)	
7:00 AM	6	34	No	No	
8:00 AM	5	41	No	No	
9:00 AM	3	54	No	No	
10:00 AM	4	28	No	No	
11:00 AM	6	17	No	No	
5:00 PM	8	10	No	No	
6:00 PM	0	14	No	No	
7:00 PM	7	8	No	No	
8:00 PM	3	12	No	No	
	Warrant Satisfied	λŝ	No	No	

		aseo Padre Park (Major) Il Crossings and A	-		Condi	ant 4 ition B: Peak-Hour
Hour Starting	Vehicular Volume Total June 23, 2017	Pedestrian Crossing June 23, 2017	Vehicular Volume Total June 24, 2017	Pedestrian Crossing June 24, 2017	Condition A Satisfied? (70%)	Condition B Satisfied? (70%)
7:00 AM	1320	6	191	34	No	No
7:15 AM	1281	5	222	46	No	No
7:30 AM	1233	5	250	50	No	No
7:45 AM	1257	6	282	43	No	No
8:00 AM	1203	5	284	41	No	No
8:15 AM	1169	3	302	49	No	No
8:30 AM	1114	3	325	48	No	No
8:45 AM	981	1	326	54	No	No
9:00 AM	878	3	327	54	No	No
9:15 AM	760	2	326	34	No	No
9:30 AM	621	2	319	30	No	No
9:45 AM	538	3	339	28	No	No
10:00 AM	474	4	375	28	No	No
10:15 AM	427	5	387*	28*	No	No
10:30 AM	389	6	405	27	No	No
10:45 AM	381	8	414	22	No	No
11:00 AM	367	6	395	17	No	No
5:45 PM	1568	2	458	13	No	No
6:00 PM	1512	0	459	14	No	No
6:15 PM	1348	1	451	10	No	No
7:15 PM	661	8	303	11	No	No
7:30 PM	598	7	291	17	No	No
7:45 PM	528	5	287	16	No	No
		Warrant Satisfied	γŝ	1	No	No

Table A4: Warrant 4 (Condition B), Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive

*Volumes used in the Pedestrian Hybrid Beacon Warrant (Figure 5).

Pedestrian Hybrid Beacon Warrant

The CA MUTCD Pedestrian Hybrid Beacon Warrant (Figure 6) dictates that a Pedestrian Hybrid Beacon may be considered at a location where the major street speed exceeds 35 mph when the plotted point of the single highest peak-hour of an average day is plotted above the curve in the Figure 5 below.

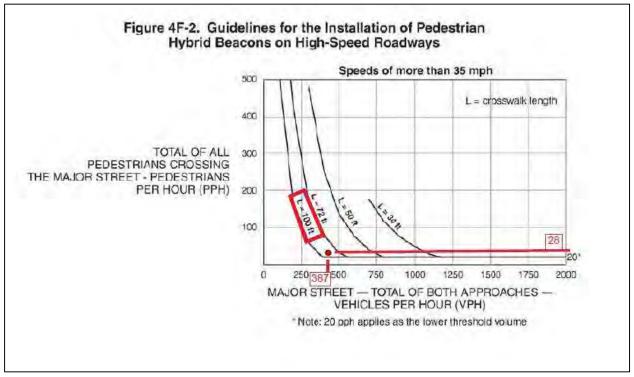


Figure 6 CA MUTCD Pedestrian Hybrid Beacon Warrant

The crosswalk length across Paseo Padre Parkway is 90 feet from the pork-chop island to the far curb ramp. Figure 5 shows the plotted point of one peak-hour, from the Saturday observed, that falls above the applicable curve (using the curve for a 100-foot crosswalk). The plotted point used, from Table A4, represents the peak-hour starting from 10:15 AM where the total vehicular counts on Paseo Padre Parkway and total pedestrians which crossed the major street were 387 and 28, respectively. Thus, the existing pedestrian and traffic volumes for the observed Saturday meet the standards for the Pedestrian Hybrid Beacon Warrant.

Appendix D EBRPD Guidelines for Protecting Parkland Archaeological Sites

EBRPD GUIDELINES FOR PROTECTING PARKLAND ARCHAEOLOGICAL SITES

Background

- I. The <u>District's Master Plan</u> mandates preservation of prehistoric resources on lands owned or operated by the District. "The District will preserve cultural resources 'in situ' wherever feasible. After consulting with recognized authorities and groups, the Board will adopt a reinterment plan for the remains of Native Americans and their associated artifacts."
- II. Ordinance #38

ARCHAEOLOGICAL FEATURES. No person shall damage, injure, collect or remove, any object of paleontological, archaeological or historical interest or value located on District parklands. In addition, any person who willfully injures an object of archaeological or historical interest or value or enters a fenced and posted archaeological site shall be arrested or issued a citation pursuant to Penal code Section 622-1/2.

III. State Law

Native American graves and artifacts. Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location is guilty of a misdemeanor. State law prohibits any person from obtaining or possessing any Native American artifacts or human remains taken from a Native American grave or cairn on or after January 1, 1984.

It is a felony punishable by imprisonment in the state prison for any person to knowingly or willfully obtain or possess any Native American artifacts or human remains taken from a Native American grave or cairn after January 1, 1988, except as otherwise provided by law.

SECTION 1. Section 7050.5 of the Health and Safety Code 7050.5 (a) Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the Public Resources Code. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (1) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code.

(b) In the event of discovery of recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part

EBRPD Guidelines For Protecting Parkland Archaeological Sites Page 2

3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

(c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

SEC. 2 Section 5097.99 of the Public Resources Code is amended to read:

5097.99. (a) No person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn on or after January 1, 1984, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (1) of Section 5097.94 or pursuant to Section 5097.98.

(b) Any person who knowingly or willfully obtains or possesses any Native American artifacts or human remains which are taken from a Native American grave or cairn after January 1, 1988, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (1) of Section 5097.94 or pursuant to Section 5097.98, is guilty of a felony which is punishable by imprisonment in the state prison.

IV. EBRPD Operational Guidelines

- A. O&I managers and supervisors will follow the archaeological site operations and protection procedures and mitigations prescribed in any adopted LUDP/EIR or interim use plan for parks under their control.
- B. For parks without LUDP/EIR's, O&I managers and supervisors will identify known archaeological sites, and will conduct park operations in a manner to avoid disturbance of known features. In the event disturbance is unavoidable for any project, we will comply with the District's CEQA process prior to project initiation.

- C. Identified Native American sites will be zoned as special protection units in the O&I resource mapping project, and will be preserved and managed in their natural condition. A minimum 50' buffer will be established around each known site to ensure that encroachments will not desecrate burials or damage artifacts. If a new site is discovered within a developed area, the District, in consultation with local descendents and a qualified archaeologist, will develop special operational guidelines to protect the site and to regulate and control digging, trenching, grading or other activities. Any digging or trenching in or near a known site where human remains might be present will be done with a local designated Native American observer present.
- D. The District will respect the native religious and cultural rights of Ohlone, Yokut, and Miwok descendents. The District will consult with the most likely living descendents recommended by the California Native American Heritage Commission on all matters of:
 - 1. How best to protect the site.
 - 2. How best to keep certain sites secret, to decide which sites are appropriate to interpret, and how to involve descendents in telling the Ohlone, Yokut, and Miwok story.
 - 3. How to comply with the wishes of local descendents on matters of religious and cultural beliefs.
 - 4. How to handle the protection and the dignified reinterment of human remains, and other personal items associated with burials.
 - 5. How to protect, preserve, catalog, and present for educational purposes any appropriate artifacts found at the park.
 - 6. How, if, and when any scientific inquiry is appropriate or advisable at the site or involving any disturbed human remains or features. The District will not generally allow archaeological digs to occur on identified sites.

E. Reinterment Plan Policies

The specific plan for reinterment of-human remains and associated burial objects found on District lands will be decided in consultation with the most likely descendents of each tribe for a park site using the following policies:

1. Remains and objects removed from a parkland or disturbed during construction will be reinterred at an appropriate site close to the original burial.

EBRPD Guidelines For Protecting Parkland Archaeological Sites Page 4

- 2. The District will cooperate with descendents in returning burial remains that were excavated in archaeological digs prior to District ownership of the parkland.
- 3. The reinterment site will be documented in an appropriate fashion, i.e., either a secret site or a public site for educational purposes.
- F. Other identified archaeological sites (other than Native American Indian) will also be zoned as special protection units in the O&I resource mapping project, and will be preserved and protected as features of the park. A minimum 50' buffer will be established around the site to ensure protection of the resource being preserved. The District, in consultation with qualified scientists from the appropriate disciplines, will develop a specific written plan for preserving the site and for determining whether or not further archaeological or scientific discovery is warranted on a representative portion of the site. The Board of Directors, after complying with CEQA, will approve any work that would result in disturbance of the resource.

Archsites G3 **Comments and Responses for Draft Environmental Impact Report**

Coyote Hills Restoration and Public Access Project

CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA

for the East Bay Regional Park District

SCH # 2018062002

July 17, 2019

SCH # 2018062002

July 2019

Comments and Responses for Draft Environmental Impact Report

Coyote Hills Restoration and Public Access Project

for the East Bay Regional Park District



Questa Engineering Corporation

1220 Brickyard Cove Road, Suite 206 Point Richmond, California 94801 Tel: (510) 236-6114 Fax: (510) 236-2423 www.questaec.com

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1 INTRODUCTION

A. Purpose of the Environmental Impact Report

This Comments and Responses document and the Draft Environmental Impact Report (EIR) together comprise the Final EIR for the Coyote Hills Restoration and Public Access Project.

The Draft EIR described the Proposed Project, identified the environmental impacts associated with the Project, and identified mitigation measures that would minimize those impacts. The Draft EIR evaluated four alternatives to the Project: 1) the No Project Alternative, 2) Restore Contractors Residence in Place Alternative, 3) Relocate and Restore Contractors Residence Alternative, and 4) Hand Disassemble, Relocate, and Restore Contractors Residence Alternative.

This document responds to comments received during the public review period on the Draft EIR and makes revisions to the Draft EIR, as necessary, in response to these comments. The revisions are limited to correcting errors, omissions, or misinterpretations.

This document, together with the Draft EIR, will be presented to the East Bay Regional Park District (EBRPD) Board of Directors at a public meeting to certify as a complete and adequate analysis of the environmental effects of the Project, under the California Environmental Quality Act (CEQA), prior to taking action to approve the Project. The EBRPD Board must consider the conclusions of the EIR and make findings regarding that information as part of any approval.

The documents incorporated by reference in this EIR are available for public review at East Bay Regional Park District (Park District, or EBRPD) headquarters at 2950 Peralta Oaks Court, Oakland, California.

B. Environmental Review Process

Notice of Completion of Draft EIR and Review Period

A Notice of Completion of the Draft EIR (NOC) was filed with the Governor's Office of Planning and Research (OPR). The public review period began on March 7, 2019, and ended on April 22, 2019.

Draft EIR Availability for Public Review

The Draft EIR was made available for downloading from the EBRPD website at www.ebparks.org. Electronic copies were also available the Fremont Main Library, 2400 Stevenson Boulevard, Fremont; and at the Centerville Library, 3801 Nicolet Avenue, Fremont.

The public was advised of the availability of the Draft EIR through posting the Notice of Availability (NOA) onsite and at the park visitor center, as required by law. In addition, the Notice of Availability of the Draft EIR was posted in the office of the Alameda County Clerk and mailed to individuals and organizations that participated in planning workshops and meetings or otherwise requested to be included on the project mailing list compiled by EBRPD.

Agency Review

According to CEQA, lead agencies are required to consult with public agencies having jurisdiction over a Proposed Project, and to provide the general public with an opportunity to comment on the environmental impact analysis that is prepared for a project. Several federal, State, and local agencies were contacted by EBRPD or through the Governor's Office of Planning and Research and sent a copy of the Draft EIR summary and/or a compact disk with the entire Draft EIR.

Public Hearing on Final EIR, Certification, and Project Adoption

A Public Hearing will be held at an EBRPD Board meeting following publication of the Final EIR. Certification of the EIR and adoption of the project will be considered at that meeting.

Notice of the meeting will be sent to the same parties that were notified of the publication of the Draft EIR and any additional parties that request notification.

C. Document Organization

This document is organized into the following chapters:

- Chapter 1: Introduction. This chapter discusses the use and organization of this Comments and Responses document and the Final EIR.
- Chapter 2: List of Commenters. Names of organizations and individuals who commented on the Draft EIR are included in this chapter.
- Chapter 3: Comments and Responses. This chapter contains a tabular listing of each comment and responses to them; master responses to commonly-made comments; and reproductions of the letters received from organizations and individuals on the Draft EIR.
- ◆ Chapter 4: Revisions to the Draft EIR. Additional corrections to the text and graphics of the Draft EIR are contained in this chapter. <u>Underlined</u> text represents language that has been added to the EIR; text with strikethrough has been deleted from the EIR.

2 LIST OF COMMENTERS

A. Overview

This chapter lists the sources of all letters and comments received on the Coyote Hills Restoration and Public Access Project during the public review period.

B. List of Those Who Commented on the Draft EIR

The comments are sorted in the following order: state agencies, regional/county agencies, local agencies, non-profit and community-based groups, and private firms and individuals. Comments within each category are arranged approximately in the order received. The commenters are identified by an abbreviation that is used in the table of responses and in annotations to the letters and transcripts in Chapter 3.

CEQA Section 15088 requires a response to comments that pertain to the significant environmental issues raised. Several other types of comments are included in these letters, such as those pertaining to: conditions of project approval, project merits, and other expressions of opinion. These latter types of comments do not require a response under CEQA. However, the comments and the District's response (if any) will be forwarded to the EBRPD Board for its review and consideration prior to any decision on the Project.

Date Received	Name	Acronym
FEDERAL AGENC	IES	
April 29, 2019	U.S. Fish and Wildlife Service	FWS
STATE AGENCIES		
March 21, 2019	Native American Heritage Commission (G. Totton)	NAHC
LOCAL AGENCIES	6	
April 19, 2019	City of Fremont (B. Roth)	CF
NON-PROFIT ANI	O COMMUNITY-BASED GROUPS	
March 7, 2019	Friends of Coyote Hills (D. Ondrasek)	FCH1
April 20, 2019	Friends of Coyote Hills (D. Ondrasek)	FCH2
April 21, 2019	Sierra Club, San Francisco Bay Chapter (N. La Force)	SCSF1
April 21, 2019	Sierra Club, San Francisco Bay Chapter (N. La Force)	SCSF2
April 22, 2019	California Native Plant Society	CNPS
April 22, 2019	Golden Gate Audubon Society	GGAS
April 22, 2019	Citizens Committee to Complete the Refuge (C. High), et. al.	CCCR
May 7, 2019	Citizens for East Shore Parks	CESP
PRIVATE FIRMS A	ND INDIVIDUALS	
April 3, 2019	Carin High	СН
April 22, 2019	Scott Cashen, MS	SC

TABLE 2-1 COMMENT LETTERS AND TRANSCRIPTS ON DRAFT EIR

3 COMMENTS AND RESPONSES

Each comment letter or email listed in Chapter 2 is reproduced on the following pages, with individual comments identified by number. Responses follow each comment letter or email, identified by number.

A. Federal Agencies

United States Fish and Wildlife Service (C. Barr)



United States Department of the Interior

FISH AND WILDLIFE SERVICE San Francisco Bay National Wildlife Refuge Complex 9500 Thornton Avenue Newark, California 94560



April 29, 2019

Karla Cuero East Bay Regional Park District Acquisition, Stewardship, and Development Division 2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605

Dear Ms. Cuero:

Please consider our clarifications regarding the Land Use Plan Amendment (LUPA) for the Coyote Hills Restoration and Public Access Project.

We wish to clarify the section regarding public use in the project location. The Don Edwards San Francisco Bay National Wildlife Refuge contains 70 miles of habitat berms, of which 40 miles are open to the public. The South Bay Salt Pond Restoration Project does include public access opportunities in its projects.

Regarding sea-level rise for impacts to neighboring wildlife refuges, we are not aware of specific projections for our trails to be gradually lost to sea-level rise at this time. Climate change and increasing storm events are a component we consider in our long-term planning and management for the Refuge.

We appreciate the opportunity to provide input on LUPA. Please feel free to contact me at (510) 792-0222 ext.127 should you have questions.

Sincerely,

Alban

Chris Barr Deputy Project Leader, San Francisco Bay National Wildlife Refuge Complex

FWS-1

Response FWS-1

(Note: Correspondence received after close of comment period)

The commenter wishes to clarify for the record that there are 70 miles of habitat berms) in the Don Edwards Wildlife Refuge of which over 40 miles are open to the public.

However the Don Edwards Wildlife Refuge includes lands in San Mateo and Santa Clara County in addition to Refuge lands in Alameda County. Many of these areas are not readily accessible to the residents of southern Alameda County. Based on published public access trail maps covering the vicinity of the project, we estimate that there are about five miles of trail within the federal Refuge in Alameda County.

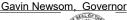
Based on the elevation of the berm trails, as noted on LiDAR topographic maps of this area, most of the berms appear to be at relatively low elevations and will not be resilient to sea level rise.

See also Response to Comment CCCR-16, -17.

B. State Agencies

Native American Heritage Commission

STATE OF CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION Cultural and Environmental Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone (916) 373-3710 Email: <u>nahc@nahc.ca.gov</u> Website: <u>http://www.nahc.ca.gov</u>





March 20, 2019

Karla Cuero East Bay Regional Park District 2950 Peralta Oaks Court Oakland, CA 94605

Also sent via e-mail: kcuero@ebparks.org

RE: SCH# 2018062002, Coyote Hills Restoration and Public Access Project; City of Fremont, Alameda County, California

Dear Ms. Cuero:

The Native American Heritage Commission (NAHC) has reviewed the Draft Environmental Impact Report (DEIR) prepared for the above referenced project. The review included the Introduction and Project Description; the Executive Summary, Table 2-1; the Environmental Evaluation, section 4.2, Cultural Resources and Tribal Cultural Resources; the Cumulative Impacts Analysis; and the Initial Study, Mitigated Negative Declaration prepared by Questa Engineering/ Basin Research Associates for the East Bay Regional Park District. We have the following concern(s):

- 1. There are errors in the Mitigation Measures and Standard Conditions for Cultural Resources/Tribal Cultural Resources:
 - a. Impact CUL-5 states that the Park District will contact the NAHC if Native American human remains are found. Public Resources Code § 5097.98 specifies that the coroner will contact the NAHC after confirming the remains are Native American.
 - b. The Most Likely Descendant (MLD) timeline in Impact CUL-5 is incorrect. Public Resources Code § 5097.98 (revised) specifies that an MLD has **48 hours after being allowed access to the site** to make recommendations for disposition of the remains and associated grave goods.
 - c. The City of Fremont Municipal Code section (c) Cultural Resources, subsection (2)(D) states that Tribal Cultural Resources (TCRs) that may be inadvertently discovered would be "under the discretion of the consulting archaeologist". This code section does not include tribal input on the disposition of inadvertent finds of TCRs if avoidance is not feasible.
 d. Mitigation and Conditions language for archaeological resources is not always appropriate for measures.
 - d. Mitigation and Conditions language for archaeological resources is not always appropriate for measures specifically for handling Tribal Cultural Resources.

Agencies should be aware that AB 52 does not preclude them from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: <u>http://nahc.ca.gov/resources/forms/</u>. Additional information regarding AB 52 can be found online at <u>http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation CalEPAPDF.pdf</u>, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of <u>portions</u> of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, B.S., M.A., Ph. D Associate Governmental Program Analyst

Attachment cc: State Clearinghouse The California Environmental Quality Act (CEQA)¹, specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.² If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.³ In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).⁴ AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015. AB 52 created a separate category for "tribal cultural resources"⁵, that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.⁶ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.⁷ Your project may also be subject to Senate Bill 18 (SB 18) (Burton, Chapter 905, Statutes of 2004), Government Code §65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. Both SB 18 and AB 52 have tribal consultation requirements. Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966⁸ may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Pertinent Statutory Information:

Under AB 52:

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.⁹ and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18).¹⁰

The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- Alternatives to the project. a.
- Recommended mitigation measures. b.
- Significant effects.11 C.
- 1. The following topics are discretionary topics of consultation:
 - Type of environmental review necessary. а.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. 12

With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.13

If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

³ Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)

¹ Pub. Resources Code § 21000 et seq.

² Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)

⁴ Government Code 65352.3

⁵ Pub. Resources Code § 21074

⁶ Pub. Resources Code § 21074 ⁶ Pub. Resources Code § 21084.2 ⁷ Pub. Resources Code § 21084.3 (a) ⁸ 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

⁹ Pub. Resources Code § 21080.3.1, subds. (d) and (e)

¹⁰ Pub. Resources Code § 21080.3.1 (b) ¹¹ Pub. Resources Code § 21080.3.2 (a)

¹² Pub. Resources Code § 21080.3.2 (a)

¹³ Pub. Resources Code § 21082.3 (c)(1)

 Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.¹⁴

Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.¹⁵ Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program**, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.¹⁶

If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code §21084.3 (b).¹⁷ An environmental impact report **may not be certified**, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- **a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
- **b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days.¹⁸

This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code §65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described §5097.9 and §5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code §65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Public Resources Code §5097.9 and §5097.993.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- <u>Tribal Consultation</u>: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.¹⁹
- <u>There is no Statutory Time Limit on Tribal Consultation under the law.</u>
- <u>Confidentiality</u>: Consistent with the guidelines developed and adopted by the Office of Planning and Research,²⁰ the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction.²¹
- Conclusion Tribal Consultation: Consultation should be concluded at the point in which:
 - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.²²

NAHC Recommendations for Cultural Resources Assessments:

• Contact the NAHC for:

¹⁴ Pub. Resources Code § 21082.3 (b)

¹⁵ Pub. Resources Code § 21080.3.2 (b)

 ¹⁶ Pub. Resources Code § 21082.3 (a)
 ¹⁷ Pub. Resources Code § 21082.3 (e)

¹⁸ Pub. Resources Code § 21082.3 (d)

¹⁹ (Gov. Code § 65352.3 (a)(2)).

 $^{^{20}}$ pursuant to Gov. Code section 65040.2,

²¹ (Gov. Code § 65352.3 (b)).

²² (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

- A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
- A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
 - The request form can be found at <u>http://nahc.ca.gov/resources/forms/</u>.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (<u>http://ohp.parks.ca.gov/?page_id=1068</u>) for an archaeological records search. The records search will determine:
 - If part or the entire APE has been previously surveyed for cultural resources.
 - o If any known cultural resources have been already been recorded on or adjacent to the APE.
 - o If the probability is low, moderate, or high that cultural resources are located in the APE.
 - o If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.²³
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.²⁴

The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.²⁵ In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

²³ (Civ. Code § 815.3 (c)).

²⁴ (Pub. Resources Code § 5097.991).

²⁵ per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

Response to Comments NAHC-1 through NAHC-6

Response NAHC-1

See Responses NAHC-2 through NAHC-5.

Response NAHC-2

Mitigation Measure CUL-5, on pages 28 and 145-146 of the Draft EIR, is revised as follows:

Mitigation Measure CUL-5: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the coronerPark District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The most likely descendant shall have 48 hours after being allowed access to the site to make recommendations for disposition of the remains and associated grave goods.

With the changes above, the revised Mitigation Measure CUL-5 further clarifies Mitigation Measure CUL-5 in the Draft EIR and further reduces an already insignificant impact. No significant new impacts, or substantial increase in the severity of an impact identified in the Draft EIR, are identified by the text changes above. Therefore, recirculation of the Draft EIR is not required.

Response NAHC-3

See response NAHC-2.

Response NAHC-4

As stated on pages 135-136 of the Draft EIR, Section 18.218.050(c), Subsection (2) (D), of Standard Development Requirements, of the City of Fremont Municipal Code stipulates:

(D) If resources are discovered during ground disturbing activities that may be classified as historical, unique archaeological, or tribal cultural resources, ground disturbing activities shall cease immediately, and the planning manager shall be notified. The resources will be evaluated by a qualified archaeologist and, in the planning manager's discretion, a tribal cultural monitor. If the resources are determined to be historical, unique archaeological, or tribal cultural resources, then a plan for avoiding the resources shall be prepared. If avoidance is infeasible, then all significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. Any plan for avoidance or mitigation shall be subject to the approval of the planning manager.

As noted in the comment, this code section does not include tribal input on the disposition of inadvertent finds of Tribal Cultural Resources if avoidance is not feasible. However, Mitigation Measures CUL-3a, CUL-5, and CUL-6a and CUL-6b, on pages 144-146 of the Draft EIR, do provide for tribal input in the case of inadvertent finds.

Response NAHC-5

As the comment notes, archaeological resources and Tribal Cultural Resources, and their appropriate mitigation measures, are not the same. However, for the Proposed Project, as discussed on page 146 of the Draft EIR, compliance with existing federal, State, and local laws and regulations, East Bay Regional Park District and City of Fremont General Plan cultural resource preservation policies, and implementation of Mitigation Measures CUL-3a and CUL-5, would reduce any impacts to Tribal Cultural Resources discovered on the project site as a result of project implementation, to a less-than-significant level.

Response NAHC-6

Comment noted. The Park District will consider this input prior to taking action on the EIR and LUPA. The Park District anticipates continuing to request Native American Tribal Consultation lists and Sacred Lands File searches from the NAHC, as appropriate for future projects.

The Park District notified the Native American Heritage Commission (NAHC) of the Proposed Project in February 2017. The NAHC provided a list of Native American Tribes with an interest in the project area, and the Representative from each of these Tribes was sent correspondence regarding the project inviting Tribes to notify the District if they wished to engage in consultation. The Park District received letters requesting consultation under AB 52 from Ramona Garibay, Himr'n Tribal Historic Preservation Officer; Corrina Gould, Spokesperson Confederated Villages of Lisjan; and Ruth Orta, Himr'n Traditional Tribal Chair. The Park District sent letters, which are reproduced on pages 448-453 of Appendix B of the Draft EIR, to these three representatives. Andrew Galvan was listed as the contact for the Ohlone Indian Tribe and identified as the Most Likely Descendant. Mr. Galvan requested consultation with the Park District which was held on April 26, 2018.

In addition to the AB 52 requirements discussed above, SB 18 requires certain local governments that are considering adoption or amendment of a general plan or a specific plan, or to designation of open space, to contact the tribes identified by the NAHC. SB 18 does not apply to the Park District.

C. Local Agencies

City of Fremont (B. Roth)



April 19, 2019

Karla Cuero, Project Coordinator East Bay Regional Park District Acquisition, Stewardship, and Development Division 2950 Peralta Oaks Court PO Box 5381 Oakland, CA 94605 (by email to: <u>kcuero@ebparks.org</u>)

Subject: Comments on Draft Environmental Impact Report for Coyote Hills Restoration and Public Access Project

Dear Ms. Cuero,

Thank you for giving the City of Fremont (City) the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Coyote Hills Restoration and Public Access Project. As a Responsible Agency, the City will rely on the DEIR to approve future discretionary permits. We are supportive of the East Bay Regional Park District's efforts to restore and enhance natural habitat while increasing public access in the Coyote Hills area.

DEIR Comments

- Page 1, third paragraph Picnic facilities are inconsistently described in the DEIR. Based on the picnic area size and furnishings described on page 49, the picnic area would be of a size and configuration that would serve as a group picnic destination, with or without reservations, and would require a Conditional Use Permit (CUP).
- Page 4, third paragraph Change "these three issues in more detail" to "these <u>four</u> issues in more detail"
- Page 8, third paragraph the following is a suggested list format (rather than the paragraph format used in the DEIR) for the approvals needed from the City, with minor corrections to the text.

City of Fremont – Elements of the park development plan that will require approvals from the City of Fremont:

- Group Picnic Facility Requires a Conditional Use Permit (CUP) and Discretionary Design Review
- Patterson Ranch Labor Contractor's Residence, Dismantling and Removal Requires Historical Architectural Review and a demolition permit
- Arden Dairy Milk House, Adaptive Re-use Requires a CUP and a building permit
- Farm Stand The Farm Stand would be considered an ancillary use to an otherwise permitted agricultural use and is allowed, but would be subject to

CF-1

CF-2

CF-3

	special provisions contained in Fremont Municipal Code (FMC) Section	
	18.19.470 (Roadside Stands). Requires a building permit.	
	 Grading – Requires a Grading Permit. 	
	 Stormwater Management – Requires a stormwater management and drainage 	
	permit.	CF-3
	 Street Tree Removal – Requires a tree removal permit 	(Cont.)
	 Bridges – Requires review by City Engineering and approval by the City's Floodplain Manager for bridges over FEMA regulatory plains. 	
	 Public right of way improvements and improvements to or within the Patterson Ranch Road – Paseo Padre intersection – Requires approval of Project Plans, Encroachment Permits, and Construction Agreements. 	
4.	Page 10, AIR-1 – This is a Standard Development Requirement required of the project per	
	Fremont Municipal Code (FMC) Chapter 18.218. Per FMC Section 18.218.010, all development	
	projects that have the potential to adversely disturb or impact a) special-status species; b)	05.4
	cultural resources; and c) air quality due to construction activities such as grading, demolition,	CF-4
	and tree and shrub removal, shall implement the adopted standard development requirements	
	to address resource protection provided in FMC Section 18.218.050.	
5.	Page 26, CUL-1b - To allow the adaptive reuse of the milk house, approval of a Conditional Use	
	Permit would be required. See Table 18.55.110 of the Fremont Municipal Code (FMC): "Uses in	CF-5
	historic structures incidental to preserving the structures and their historic qualities and setting,	
	which are listed on the national, state or local list of historic resources."	
6.	Page 27, CUL-2a - Including interpretive signage and providing copies of HABS documentation to	
	City and local museums/library should be included with this measure and would be consistent	CF-6
	with what has been done recently on similar projects in Fremont. Page 129 of the ADEIR	CF-0
	mentioned that copies of the HABS documentation would be provided to City, Fremont Library,	
	Washington Township Museum, but it appears that language is missing. Why?	
7.	Page 27, CUL-2a - Has analysis been conducted by a qualified historical architect that	05.7
	substantiates the current condition of the Contractor's Residence? Please include that analysis	CF-7
	in the EIR. See also Comment #13.	
8.	Page 30, HAZ-1 - Testing of soils for possible pesticides should be done at this point to	
	understand what the potential impact would be and how it should be mitigated to reduce the impact in the EIR.	CF-8
	Page 30, HAZ-1 – How was this list of the chemicals of concern established?	CF-9
10.	Page 36, NOI-1 – This is also a Standard Development Requirement, as discussed in Comment #4.	CF-1(
11	Page 45, third paragraph – "Voluntary compliance" is mentioned here and throughout the	
11.	document (DEIR pages 52, 104, 126, and Initial Study pages 4, 10, 20). Is it the Park District's	CF-11
	contention that Government Code Section 53091 is not applicable to this project? If so, this	CI-II
	position should be clearly explained.	05.40
12	Page 46, second paragraph – typo "1,00 feet"	CF-12
	Page 53, first paragraph - The DPR form the City has on record (2007) indicates the Farm Labor	
15.	Contractors Residence retains a high degree of integrity and the "foundation, structural frame,	
	and wood siding appear to be in good condition." Has analysis been conducted by a qualified	CF-13
	historical architect that substantiates that the condition has deteriorated? This analysis should	
	be provided in the EIR.	I
14	Page 54, sixth bullet – Change "City of Fremont (City) Departments of Engineering and	1
7.41	Planning" to "City of Fremont (City) <u>Divisions</u> of Engineering and Planning."	CF-14

 Page 60, first paragraph – Per 2017 BAAQMD CEQA Guidelines, >10,000cy soil import/export is considered extensive material transport. Consider adding a reference to the Initial Study Air 	CF-15
Quality Analysis that concludes emissions would fall below thresholds such that BAAQMD Table 8-3 mitigation for extensive material transport is not necessary.	
16. Page 69, first paragraph, "(need more information)"	CF-16
 Page 107, last bullet – Provide reference for "Park District's Pathogen Controls Best Management Practices" 	CF-17
18. Page 117, first paragraph – Typo "CESA" should be "CEQA"	CF-18
19. Page 125, fourth paragraph – Add "2)" before Watercourse.	CF-19
20. Page 137, second paragraph - A Conditional Use Permit (CUP) is required for the adaptive re-use of an historic building. See Fremont Municipal Code (FMC) Table 18.55.110 "Uses in historic structures" in the Open Space (OS) column.	CF-20
21. Page 143, fifth paragraph - Dismantling and removal of the Patterson Ranch Labor Contractor's Residence would "cause a substantial adverse change in the significance of the ' <u>Historic</u> <u>Resource</u> .'"	CF-21
22. Figures 7A through 7F (pdf pages 250-255 of 508) – Concerning stormwater runoff, Figures 7A- 7F show the paved trail areas going to the wetlands. These areas would require some type of collection and treatment system and it is not clear how that would be done based on the sections. Ensure detail is provided when submitting for Design Review.	CF-22

Please feel free to contact me at (510) 494-4450 or broth@fremont.gov, if you have any questions.

Sincerely,

Pran 25

Bill Roth Associate Planner

cc: File

Response to Comments CF-1 through CF-22

Response CF-1

The Park District's experience is that groups do not use non-designated group picnic facilities, as the tables are set further apart (for user privacy considerations), and the groups typically want some assurance of availability of facilities, such as through a reservation, before events are planned/scheduled.

The Park District will continue to coordinate with the City of Fremont on any group picnic area and other planning and design issues as construction plans and permit applications are submitted for review and approval.

Response CF-2

The third paragraph of page 4 of the Draft EIR is revised as follows:

Because there could be potentially significant impacts from the Proposed Project for the <u>fourthree</u> issues listed above, an EIR was prepared to evaluate these issues in more detail.

Response CF-3

The third paragraph of page 1 of the Draft EIR is revised as follows:

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA). The East Bay Regional Park District (Park District, or EBRPD) is the lead agency for the Project. There are two responsible agencies with discretionary approval over certain elements of the Project: the City of Fremont and the Alameda County Flood Control and Water Conservation District. The Project will The Park District will work with the City of Fremont on require permits for building, building demolition, reuse of an historic structure, pienic area if group pienic areas are proposed, bridges, improvements within Patterson Ranch Road-Paseo Padre Parkway intersection, grading, drainage, and stormwater management issued by the City of Fremont. Other City of Fremont review would include historic architectural review, discretionary design review forif any group picnic areas are proposed, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, and potentially tree removal permits if street trees are affected.

The third paragraph of page 8 of the Draft EIR is revised as follows:

City of Fremont – Implementation of elements of the park development plan may require: Conditional Use Permit (CUP) and discretionary design review, as needed for establishing a group picnic facility, Discretionary Design Review Permit for proposed site improvements, Historic Architectural Review for dismantling and removal of the Labor Contractors Residence and substantial revisions to the historic Arden Dairy Milk House, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, grading permit, stormwater management and drainage permit, building permits, including CALGreen compliance, tree removal permits if street trees are affected, review by the City Engineering Department and approval by the City's Floodplain Manager in the Engineering Department of any bridges over FEMA regulatory flood plains, and approval of Project Plans, Encroachment Permits and other construction agreements for improvements to or within the Patterson Ranch Road-Paseo Padre Parkway intersection and public road improvements.

 <u>City of Fremont – Elements of the park development plan that could will-require approvals from the</u> <u>City of Fremont:</u>

- <u>Group Picnic Facility</u> –Depending on the ultimate size and configuration, a Conditional Use Permit (CUP) and Discretionary Design Review.
- <u>Patterson Ranch Labor Contractors Residence</u>, Dismantling and Removal Historic Architectural Review and a demolition permit.
- Arden Dairy Milk House, Adaptive Re-use CUP and a building permit.
- *Farm Stand* The Farm Stand would be considered an ancillary use to an otherwise permitted agricultural use and is allowed, but could be subject to special provisions contained in Fremont Municipal Code (FMC) Section 18.19.470 (Roadside Stands) and a building permit.
- <u>Grading Grading permit.</u>
- <u>Stormwater Management Stormwater management and drainage permit.</u>
- <u>Street Tree Removal Tree removal permit for any City street trees that need to be removed</u>.
- <u>Bridges Requires review by the City Engineering and approval by the City's Floodplain Manager</u> for bridges over FEMA regulatory flood plains.
- <u>Public Right-of-Way Improvements and Improvements to or Within the Patterson Ranch Road-Paseo Padre</u> <u>Parkway Intersection-- Requires approval of Project Plans, Encroachment Permits and</u> <u>Construction Agreements.</u>

Response CF-4

As stated on page 40 of Appendix A (Initial Study) of the Draft EIR, the construction Best Management Practices (BMPs) to control fugitive dust that are listed in Mitigation Measure AIR-1 are also found in the City of Fremont's Standard Development Requirements in Municipal Code Section 18.218.050. Therefore, Mitigation Measure AIR-1 is consistent with the City's Code.

Response CF-5

Revisions to the Draft EIR, described in Response CF-3, above, clarify that a Conditional Use Permit would be required for adaptive reuse of the Arden Dairy Milk House. Further, Mitigation Measure CUL-1b has been revised.

Mitigation Measure CUL-1b, on pages 26 and 142-143 of the Draft EIR, is revised as follows:

Mitigation Measure CUL-1b: If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont. <u>A</u> <u>Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code</u>.

While impacts were already mitigated to a less-than-significant level by Mitigation Measure CUL-1b, the measure has been further clarified and the impact further reduced. No significant new impacts, or substantial increase in the severity of an impact identified in the Draft EIR, are identified by the text changes above. Therefore, recirculation of the Draft EIR is not required.

Response CF-6

Mitigation Measure CUL-2b, on pages 27 and 143 of the Draft EIR, requires interpretive signage.

Mitigation Measure CUL-2a, on pages 27 and 143 of the Draft EIR, is revised as follows:

Mitigation Measure CUL-2a: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interiorqualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board. The documentation materials shall be placed on file with the City of Fremont, the Washington Township Museum of Local History, and the Fremont Main Library.

While impacts were already mitigated to a less-than-significant level by Mitigation Measure CUL-1b, the measure has been further clarified and the impact further reduced. No significant new impacts, or substantial increase in the severity of an impact identified in the Draft EIR, are identified by the text changes above. Therefore, recirculation of the Draft EIR is not required.

Response CF-7

As discussed on page 141 of the Draft EIR, a Conditions Assessment and Recommendations for the Contractors Residence, by a qualified historical architect, was conducted in 2017, and is cited in footnote 40 on page 141 of the Draft EIR. Because this study is more current than the 2007 DPR form mentioned in Comment CF-13, its conclusions were used in the Draft EIR.

Response CF-8

This comment suggests testing of soils for pesticides, but this has already occurred as part of development of the EIR. As discussed on pages 52-53 of Appendix A (Initial Study) of the Draft EIR, soil testing for pesticides was done as part of preparation of the EIR, in 2015. In addition, Mitigation Measure HAZ-1, page 56 of Appendix A (Initial Study) of the Draft EIR, requires further sampling and testing of surface and near-surface soils for potential pesticide contaminants.

Response CF-9

The chemicals of concern listed in Mitigation Measure HAZ-1, page 56 of Appendix A (Initial Study) of the Draft EIR, is derived from the analysis of hazardous materials at the project site conducted by TRC, an independent consultant. This report is cited and discussed on pages 52-53 of Appendix A (Initial Study) of the Draft EIR.

Response CF-10

The City of Fremont Standard Development Requirements for noise (Fremont Municipal Code 18.218.010), are reproduced in the discussion of noise impacts on page 69 of Appendix A (Initial Study) of the Draft EIR. As discussed on page 72 of Appendix A (Initial Study) of the Draft EIR,

compliance with Fremont Standard Development Requirements for noise, and Mitigation Measures NMOI-1, would reduce the project's construction noise impacts to a less-than-significant level.

Response CF-11

The Park District is not a typical local agency in that its enabling legislation specifically authorizes it to construct and operate park and recreation facilities, such as trails, wildlife observation areas, and parking lots. *See* Pub. Resources Code §§ 5541, 5541.1. The Park District's authority to manage its own land is extensive, and nearly exclusive. The Park District also has the ability to pass and enforce ordinances, which it does from time to time, and has developed Standard Plans and Specifications for many of its recreation-related structures based on the California Building Code.

Nonetheless, the Park District works cooperatively with cities and counties on plan approval. Because the Park District operates within two Counties (Alameda and Contra Costa) and many cities within these counties, it is efficient for the Park District to coordinate with local jurisdictions in using local grading, building, stormwater, and other codes and ordinances, as these often best reflect local conditions and needs.

The Park District will continue to work closely with the City of Fremont and the Alameda County Flood Control and Water Conservation District (ACFCWCD) as the Proposed Project proceeds through environmental review and permitting and advanced planning and design.

Response CF-12

To correct a typographical error, the second paragraph on page 46 in Chapter 3- Project Description of the Draft EIR is amended as follows:

Connections would also be made to the new San Francisco Bay Trail along the west side of Paseo Padre Parkway, and the Bay Trail would be extended south to the vicinity of Dumbarton Circle and Quarry Road, an additional approximately 1,000 feet.

Response CF-13

See Response CF-7.

Response CF-14

The sixth bulleted item on page 54 in Chapter 3- Project Description of the Draft EIR is amended as follows:

• City of Fremont (City) Department Divisions of Engineering and Planning – Management of stormwater runoff, grading and erosion control, hazardous materials/waste management, and flood plain regulation.

Response CF-15

One of the screening criteria in the Bay Area Air Quality Management District CEQA Guidelines (cited on page 37 of Appendix A (Initial Study) of the Draft EIR), used to determine whether construction of a project would have a less-than-significant impact on air quality, is import/export

of less than 10,000 cubic yards of soil during construction.¹ Project construction that imports or exports more than 10,000 cubic yards of soil is subject to the "Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold" identified in Table 8-3 page 8-5 of the Bay Area Air Quality Management District CEQA Guidelines. As stated on page 60 of the Draft EIR, the Proposed Project would import 30,000 to 50,000 cubic yards of fill/topsoil, and is therefore subject to these additional construction mitigation measures.

Mitigation Measure AIR-1, on page 10 of the Draft EIR, and pages 40-41 of Appendix A of the Draft EIR, is revised as follows:

AIR-1 The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:

- 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The EBRPD's phone number shall also be visible to ensure compliance with applicable regulations.

The following measures, contained in Table 8-3 of the Bay Area Air Quality Management District's May 2017 California Environmental Quality Act Guidelines, also shall be included in the Project construction dust/emission control plan:

- 1. <u>All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.</u>
- 2. <u>All excavation, grading, and/or demolition activities shall be suspended when average wind speeds</u> exceed 20 mph.
- 3. <u>Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas</u> of construction. Wind breaks should have at maximum 50 percent air porosity.
- 4. <u>Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas</u> as soon as possible and watered appropriately until vegetation is established.
- 5. <u>The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities</u> on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of <u>disturbed surfaces at any one time.</u>
- 6. <u>All trucks and equipment, including their tires, shall be washed off prior to leaving the site.</u>

¹ Bay Area Air Quality Management District, *California Environmental Quality Act Guidelines*, May 2017, Section 3.5.1, page 3-5.

- 7. <u>Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.</u>
- 8. <u>Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</u>
- 9. Minimizing the idling time of diesel powered construction equipment to two minutes.
- 10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- 11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- 12. <u>Requiring that all construction equipment, diesel trucks, and generators be equipped with Best</u> <u>Available Control Technology for emission reductions of NOx and PM.</u>
- 13. <u>Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.</u>

Response CF-16

The statement in the DEIR "need more information" was a review editor's note that was mistakenly not deleted. The intent was to provide additional information and definitions on CNPS rare plant rankings, including a reference citation.

Additional information on the California Native Plant Society Rare Plant Ranks can be found at:

https://www.cnps.org/rare-plants/cnps-rare-plant-ranks

Accordingly, footnote number 7 at the bottom of page 69 of the DEIR has been revised as follows to include this source.

⁷ CNPS Ranking System, http://www.cnps.org/cnps/rareplants/ranking.php, accessed on September 28, 2018. Additional information can be found at https://www.cnps.org/rare-plants/cnps-rare-plant-ranks.

Response CF-17

A description of the Park District's Pathogen Control Best Management Practices has been added after the last bullet on page 72, as follows:

East Bay Regional Park District Pathogen Control Best Management Practices One of the pathogens of greatest concern to existing and restoration habitat in the Project area is from phytophthora (*P. ramorum*) infection. Sudden Oak Death is a phytophthora disease. This is a soil-borne pathogen that infects native and non-native trees, and woody plants. Phytophthora species are land dwelling organisms that thrive under wet soil conditions, such as occurs in the Patterson Slough area.

<u>P. ramorum</u> can survive, and appears to reproduce, in watercourses that drain Sudden Oak Death affected areas, which can contain spores of <u>P. ramorum</u>. More spores are typically present in watercourses during the wet season, but spores may be present in some streams year-round. Since Patterson Slough is disconnected to upstream drainage courses, this mode of spread is of low risk.

Moist soil containing phytophthora spores or organisms on hiking boots and bicycle tires has also been shown to spread Sudden Oak Death, as have vehicles driven on dirt roads that pass through lands infested with *P. ramorum*. This is especially a risk when soil conditions are muddy or damp. Poorly operated nurseries can also spread phytophthora through infected nursery stock used in restoration. To minimize the spread of this pathogen, the Park District adopted the following Phytophthora Best Management Practices in 2018.

<u>General</u>

- 1. <u>Phytophthora ramorum</u> is the plant pathogen known to cause the Sudden Oak Death disease. The disease kills oak and other plant species, significantly woody ornamentals, and has had devastating effects on the oak populations in California. Symptoms include bleeding cankers on the tree's trunk and dieback of the foliage, in many cases eventually leading to the death of the tree.
- 2. Equipment refers to any implement used to perform maintenance activities or travel to and from work sites. These include vehicles, mowers, skip loaders, tractors, weed eaters, shovels, rakes, etc.
- 3. While absolute sanitation is difficult to attain, Contractors shall make every practicable effort to use the following District Best Management Practices (BMPs) during the project's installation and Plant Establishment period to aid in preventing possible sudden oak death disease at the Project sites.

District General Construction BMPs -Before Entering District Property

The following procedures must be followed before entering any District property, including but not limited to Project Area, to make sure vehicles and gear, tools and boots are free of potentially infected soil, weed propagules, seed or other debris.

- 1. <u>Worker Training. Before entering the job site, field workers are to receive training that includes</u> information on Phytophthora diseases and how to prevent the spread of these and other soil-borne pathogens by following approved phytosanitary procedures.
- 2. <u>Clothing and Gear. At the start of work at each new job site, worker clothes should be free of all mud or soil. If clothes are not freshly laundered, workers shall remove all debris and adhered soil with a stiff brush. All gear should be cleaned with brushes, air or water to remove as much visible mud and debris as possible</u>
- 3. <u>Vehicles and Large Equipment.</u> Vehicles that only travel and park on paved public roads do not require external cleaning.

Before arrival at construction sites, vehicles must be free of soil and debris including on tires, wheel wells, vehicle undercarriages, and other surfaces. Vehicles may be cleaned at a commercial vehicle or appropriate truck washing facility. The interior of vehicles and equipment (cabs, etc.) must also be free of mud, soil, gravel and other debris (vacuumed, swept or washed).

District General Construction BMPs Before Leaving the Project Construction Sites

To minimize the potential for *P. ramorum* to spread beyond the Project area, the following procedures must be followed before leaving Project construction sites to make sure vehicles and gear, tools and boots are free of potentially infected soil, weed propagules, seed or other debris.

- 1. <u>Cleaning Equipment and Gear On-site. Scrub, brush and pick off soil, vegetation or other debris</u> from shoes, saws, vehicles and other equipment at the field or work site (this is 99% effective at removing infectious propagules and weed seeds). Other methods may include: blowing compressed air, followed by water or sanitizing solution, if necessary. When water is used, the Contractor is to ensure that no erosion occurs, or waterways are contaminated.
- 2. <u>Cleaning Area. Cleaning should be conducted on a surface that is unlikely to allow cleaned materials</u> to become re-contaminated, such as pavement, a plastic tarp, or a continuous layer of gravel.
- 3. <u>Follow-up Cleaning. If complete on-site sanitation is not possible, decontamination can be completed at a local power wash facility or in an isolated area at an off-site equipment yard.</u>

Preventing Potential Spread of Contamination within Sites

In a partially infested site, the potential for Phytophthora to spread within the site needs to be addressed. As it is not practical to identify every portion of a site that contains or is free of *P. ramorum*. Because *P. ramorum* contamination is not visible, work practices should minimize unnecessary movement of soil within locations to prevent potential pathogen spread sign using the following Best Management Practices.

- 1. Whenever possible, work on *P. ramorum*-infected and -susceptible species during the dry season. When working in wet conditions, keep equipment on paved or dry surfaces and avoid mud.
- 2. Do not bring more vehicles into work sites than necessary. Within the site, keep vehicles on surfaced or graveled roads whenever possible to minimize soil movement.
- 3. <u>Travel off roads or on unsurfaced roads should be avoided when such roads are wet enough that soil</u> will stick to vehicle tires and undercarriages. In intermittently wet areas, avoid visits when roads are wet; schedule activities during dry conditions when the risk of moving wet soil is minimal.
- 4. <u>Vehicles should be cleaned before leaving infested areas and before entering new areas.</u>
- 5. <u>Sanitize pruning gear and other equipment before working in an area with susceptible plants to avoid transporting the *P. ramorum* pathogen throughout the site, or from an infested location to other non-infested locations.</u>
- 6. Do not use untreated water from potentially infested streams for irrigation, dust control on roads, or similar purposes. Water can be treated with ultrafiltration, chemicals (chlorine, ozone), or UV radiation to eliminate Phytophthora spores.
- 7. <u>Conform to all federal and state regulations and inspections to prevent the movement of *P. ramorum*infested nursery stock.</u>

District BMPs Community Outreach

As moist soil on hiking boots and bicycle tires has been shown to spread Sudden Oak Death, the District is working on implementing an outreach program that includes information on Best Management Practices for minimizing the spread of *P. ramorum*. This information is being incorporated into park brochures, on-site information panels and the District web site. Information includes, but is not limited to, the following guidance:

- 1. <u>The East Bay Hills contains environments conducive to P. ramorum</u>, the plant pathogen known to cause the Sudden Oak Death disease.
- 2. To minimize the spread of P. ramorum, wherever possible, Park visitors should:
 - a. <u>Stay on paved, rocked and well-traveled trails; and avoid cross-country travel, especially under wet conditions.</u>
 - b. Avoid wet areas as the risk of spreading pathogens or weeds increases with the amount of mud, soil and organic debris that adheres to shoes, tools, bicycles, pets, etc.

Response CF-18

The acronym CESA is correct, referring to the California Endangered Species Act.

To clarify, the last sentence of the first paragraph on page 117 of the Draft EIR is amended as follows:

Take is defined under CESA (California Endangered Species Act) as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.".

Response CF-19

To correct a typographical error, the first sentence of the fourth paragraph on page 125 of the Draft EIR is revised as follows:

There are three City of Fremont (local) ordinances that provide for protection of biological resources: 1) Tree Protection Ordinance), 2) Watercourse (stream) Protection Ordinance, and 3) Standard Development Requirements to Protect Resources.

Response CF-20

The following paragraph is inserted below the heading "City of Fremont Municipal Code", and above the last paragraph, on page 135 of the Draft EIR:

<u>A Conditional Use Permit is required for the adaptive reuse of an historic building, as stipulated in Table 18.55.110 of the Fremont Municipal Code.</u>

Response CF-21

The fifth paragraph on page 143 of the Draft EIR is revised as follows:

Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would cause a substantial adverse change to this <u>Historic Resource historic building</u> on the Project site. This represents a *potentially significant* impact.

Response CF-22

The Construction Plans (including for Trail near wetlands) will be submitted to the City of Fremont Design Review for review and approval associated with the grading/building permit process. The Plans will include stormwater collection and treatment, where needed.

D. Non-Profit and Community-Based Groups

Friends of Coyote Hills (D. Ondrasek, 1)

Hello,

Dan Ondrasek 510-789-5616

?

The Friends of Coyote Hills

Please add me to the mailing list regarding the above project. I was am a twenty year member of the Core Group of the "Friends of Coyote Hills." We, together with CCCR, OHS and many other regional groups fought a 14 year battle to protect these lands from development. I am extremely concerned about the parking this close to the Willow Grove area and want to know more. I appreciate all that you and the EBRPD are doing and look forward to any additional new information you can provide. Kind regards,

FCH1-1

Virus-free. www.avast.com

Response to Comment FCH1-1

Response FCH1-1

Thank you for your interest in the Project. You have been added to the Project mailing list. See also Response FCH2-2 for more discussion of Project parking.

In regards to placing the parking lot close to what commenter refers to as the "Willow Grove area" (Patterson Slough), the Concept Plan evaluated in the Draft EIR includes a minimum 100-foot hardscape setback from the willow-lined edge of the Slough for parking, and exceeds most of the creek setback ordinances enacted by cities and counties in the greater San Francisco Bay Area. For instance, the City of Fremont Watercourse Protection Ordinance calls for a 30-foot setback from watercourses.

Friends of Coyote Hills (D. Ondrasek, 2)



Karla Cuero, Environmental Programs Project Coordinator East Bay Regional Park District 2950 Peralta Oaks Court, Oakland, CA 94605 April 19, 2019

Re: Coyote Hills Restoration and Public Access Project Notice of Preparation (NOP)

Dear Karla,

"Never doubt that a small group of thoughtful, committed citizens can change the world: indeed, it's the only thing that ever has."

Margaret Mead

Such groups came together nearly twenty plus years ago with the sole purpose of saving one of the last habitats of its kind remaining in the Bay Area. Because of this, the 306-acre Patterson Ranch remains what Josh Collins of the San Francisco Estuary Institute called "the rarest of all mosaics left in the Bay Area."

In 2002, Terrain Magazine quoted Dr. Howard Cogswell: "At least 173 bird species... have been observed in the park and ranch area." Developing the ranch would gobble up "prime herb-covered hunting space for open-space birds," Cogswell said. "Losing habitat, he said, would affect meadowlarks, pheasants, winter-foraging ducks, migrating shorebirds, and especially raptors, including hawks and owls that forage in the open grassland."

The article went on to remind us that "one of the Bay's last pre-European habitats runs through the ranch and park (based on a 1999 study sponsored by the US EPA and the regional water quality board). According to the Baylands Ecosystem Habitat report: "The (Patterson Ranch) supports the largest remaining willow groves in the baylands ecosystem."

From 1990 until the Ranch's final donation to the EBRPD on June 4, 2014, multiple attempts were brought forward to cement as many as 2000 houses on these lands. Each effort was met with the full force of resistance of citizens groups such as The Friends of Coyote Hills, The

FCH2-1

Citizens Committee to Complete the Refuge (CCCR), Ohlone Audubon Society (OAS), Sierra Club and many other environmental groups and citizens.

A Historical Perspective on How these Lands Were Saved

The possibility of stopping the development had very little chance of succeeding. On December 28th, 2001, the San Jose Mercury News Editorial Board penned an opinion piece entitled "The Time Has Come" which advocated the Patterson Ranch as "an ideal location…for affordable housing." In addition (Fremont's then local paper), The Argus' editorial board stated in their February 7th, 2002 Editorial: "Sooner or later, the Patterson property is going to get developed… the time is coming. We might as well face that fact now."

Other environmental groups surrendered to a "partial development" on Patterson. The Friends of Coyote Hills as well as groups like the Citizens Committee to Complete the Refuge never did. We deeply felt that the lands West of Ardenwood Blvd, had been the natural buffer separating intensively developed areas from the Coyote Hills Regional Park.

Our teams met each week for years; attended every Council meeting; went out into the community and educated citizens of the value and rarity of these lands. We all took time away from careers, hobbies, and families to protect these lands. With education and diligence, momentum grew to maintain the Patterson Ranch's buffer protecting the Coyote Hills from the residential and industrial development pouring towards it. The Friends of Coyote Hills general membership swelled. Over 3000 citizens signed a petition, and hundreds attended community meetings demanding that no houses be built on these lands.

When, in 2006, our teams sat down with the developer/planner asking for development only East of Ardenwood Blvd. (away from the park), the developer refused and replied: "Ground would be broken on the Ranch in 2008." Our teams then changed the paradigm and began a ballot initiative. The Friends of Coyote Hills and The Citizens Committee to Complete the Refuge organized an army to gather signatures, day and night, rain or shine. The group's 13,265 signatures were 4,500 more than required to Place Measure K on the 2006 ballet. Our opponents spent over \$1.1 (vs. our \$42,469) and won the initiative. But, while the battle was lost, the war was won. The initiative, Measure K, helped to educate most of Fremont on the incredible importance of the Patterson Ranch lands and the Coyote Hills Regional Park.

Our Motivation and Our "Ask"

Our motivation for this letter is a reminder to East Bay Regional Park District Board Members and staff: Had it not been for the above people and their incredible dedication, there would likely have been no Patterson Ranch donation. Therefore, I think it important that you understand **what these people were fighting for and how some of your current plans for these**

FCH2-1 (Cont.)

donated lands are in conflict with the goals of the Friends of Coyote Hills and the many other groups and individuals that made the expansion of Coyote Hills Regional Park possible.

We all had one common goal: protecting the nature of these lands – the nucleus of which are the rare willow groves along Patterson Slough.

While there were many reasons why this development should not have been built, our group's main motivation was the protection and even expansion of the willow sausal habitat, and the protection of the wildlife that depends on it. If one compares historical and "present day" aerial maps of San Francisco baylands habitats, we see the utter devastation of willow riparian habitats along our Bay's edges. Many local groups including CCCR and OAS have always fought to keep development off these lands with the hopes of restoring the habitat. This was also a recommendation of the Bay Goals project.

The Friends of Coyote Hills agree with CCCR that placing a paved parking lot for 100 vehicles north of Patterson Ranch Road and a new picnic area, trails and observation overlooks so close to the willow groves along Patterson Slough is absolutely counter to what our vision had been for those many years. This willow sausal habitat is one of, if not the, last of its kind in the SF Bay Area. We finally have the ability to witness this rare plant community protected and potentially even expanded. Putting cars and people this close to it is counterproductive to this goal.

While we embrace EBRPD's goals of recreation and education about this treasure, this must not come at the cost of impacting this very important, sensitive habitat and the wildlife supported by this plant community. To quote Josh Collins: "The particular blend of riparian, willow grove, seasonal wetland, and tidal marsh...is almost completely gone."

We ask that you reconsider this design and move both the parking lot, picnic area, and trails away from the willow groves along Patterson Slough.

I thank you for your time, dedication, and consideration on this matter.

Yours truly, Dan Ondrasek Member/The Friends of Coyote Hills 510-789-5616 FCH2-2 (Cont.) Response to Comments FCH2-1 and FCH2-2

Response FCH2-1

Thank you for providing historical context. This comment does not question the adequacy of the information nor the analysis within the Draft EIR and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response FCH2-2

Again thank you for your work and insight in helping to make this area that was scheduled for development a part of East Bay Regional Park District Coyote Hills Regional Park. The Park District went through a comprehensive planning process that included several community workshops and public meetings before the Park District's Board, and the Draft EIR included evaluation of alternatives for placing the parking area on the south side of Patterson Ranch Road versus the option of placing it on the north side.

After reviewing the staff report and public comments, the District Board decided to designate the north side option as the preferred option to be included in the Draft LUPA and Draft CEQA document for environmental review.

The designation of the north side of Patterson Ranch Road parking area was made in part due to the community's desire to retain agriculture land-use on the south side of Patterson Road. Conversion of the area south of Patterson Road would convert some of the best land for farming and presents potential for farm operations – recreation user conflicts. The north side parking option includes a 100-foot setback for the picnic facilities and parking area from Patterson Slough, along with the inclusion of a native landscaped earthen berm that will serve as an additional protective buffer.

The alternative of placing parking and other recreational facilities on the south side of Patterson Ranch Road was evaluated and rejected by the Park District Board as placement here would be within an existing Agricultural Easement area and would conflict with a principal Project objective of maintaining agricultural operations. (See DEIR page 192).

The existing slough area and the proposed area for restoration as a willow sausal and mixed riparian forest is also designated in the LUPA as a "Special Protection Feature" and would be greatly expanded. Public access would be precluded from this area.

Two of the other important goals of the Project, as discussed at the Project community workshops, are preserving the visual sight line and view corridor of Coyote Hills, as seen from Paseo Padre Parkway, and retaining a portion of the agricultural history and farming of this area, also as visible from Paseo Padre Parkway. Relocating the picnic and parking areas to the south side of Patterson Ranch Road would mean that approximately five acres of the site's prime (best soil area with best drainage) and irrigable farmland would be lost, reducing the farm field in size to less than 40 acres. Locating the parking area south of Patterson Ranch Road would also result in potential conflicts between park visitors and farming operations.. Depending on location, the parking would conflict with the Agriculture and Conservation Protected Property and Open Space Easement area. (See LUPA Figure 5-1). There are no similar easement restrictions where the parking is proposed north of Patterson Ranch Road.

Project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR, including mitigation measures that would reduce all impacts on biological resources to a less-than-significant level.

Sierra Club, San Francisco Bay Chapter (N. La Force, 1)



San Francisco Bay Chapter Serving Alameda, Contra Costa, Marin and San Francisco Counties

April 20, 2019

Via email: kcuero@ebparks.org.

Ms. Karla Cuero East Bay Regional Park District Acquisition Stewardship and Development Division 2950 Peralta Oaks Court PO Box 5381Oakland, CA 94605

SUBJECT: DEIR - Coyote Hills Restoration and Public Access Project/ SCH # 2018062002

Dear Ms. Cuero,

The Sierra Club appreciates the opportunity to comment on the Draft Environmental Impact Report for the proposed Coyote Hills Restoration and Public Access Project (SCH # 201806200) located in the City of Fremont, Alameda County, CA.

The proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the District's 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Plan outlines the restoration and development of the Expansion area proposed in this Project.

INTRODUCTION

EIR Purpose:

The Draft Environmental Impact Report (EIR) was prepared to assess the potential environmental consequences of the proposed Coyote Hills Restoration and Public Access Project (also referred to as "the Proposed Project") in the northwest corner of the City of Fremont, California. The Project is east of Coyote Hills Regional Park and the Don Edwards San Francisco Bay Wildlife Refuge, and north of CA State Highway Route 84.

1

SCSF1-1

We commend the EBRPD for its recognition of the importance of the natural resource values of these lands, demonstrated by the references to the creation of "natural units" in the Plan. While we are encouraged by elements proposed for restoration in the DEIR, changes are necessary to balance public access with the protection and preservation of important resources in the area. To better assess the need for DEIR changes, please address some questions regarding the proposed project:	SCSF1-2
Has the District done a capacity study? How many people can the Park(s) accommodate to avoid damage to the wildlife/habitats the area was set aside to protect & preserve? The District has not addressed capacity in the past to the detriment of both Regional Preserves, and adjacent neighborhoods.	SCSF1-3
How will the District manage visitor numbers to avoid damage to the wetland, habitats and wildlife? Will trained guides/naturalists be required to accompany visitors to explore the habitat areas/natural units?	SCSF1-4
What commitment is there for enforcement of the District's rules, e.g. keeping visitors on designated trails, not creating and using social trails, and out of protected areas, keeping dogs on leash, and only in designated areas? Park hours and alcohol enforcement is also essential for quiet time after dark at the campsites , to avoid wildlife impacts?	S SCSF1-5
The District has repeatedly experienced difficulty enforcing Ord. 38 with respect to trail usage and maintenance, curfews, bicycles, and dog leash rules. As such, we recommend the District propose and implement a formal plan to actively manage visitation, to ensure Park habitats and resources are protected long-term.	SCSF1-6
In this letter, we will focus our comments on the proposed farming elements and transportation. In addition, we support the comments submitted by CCCR (Citizens Committee to Complete the Refuge).	SCSF1-7

SPECIFIC COMMENTS

The EBRPD Master Plan/Park Planning states:

The East Bay Regional Park District will acquire, develop, manage, and maintain a high quality, diverse system of interconnected parklands which balances public usage and education programs with protection and preservation of our natural and cultural resources. <u>https://www.ebparks.org/about/planning/default.htm</u>

Biological Resources

This Park is part of the largest remaining intact wetlands in the South Bay. The adjacent Don Edwards Wildlife Refuge is set aside specifically to provide protected area for migratory birds. The proposed development of additional trails and facilities in Covote Hills Regional Park is significant. We urge the District to focus on projects that protect and preserve important wildlife/habitat & educational resources.

The DEIR discusses use of herbicides for vegetation control, and irradiation of invasive weeds/plants. Reports indicate use of Pesticides/herbicides etc. adversely impacts birds, other wildlife and native plants. Has the Park District adequately addressed the use of 10 herbicides/pesticides for this park pursuant to its Integrated Pest Management Program?

According to the CA Dept of Fish & Wildlife: <u>https://www.fws.gov/birds/bird-</u> enthusiasts/threats-to-birds/habitat-impacts.php:

Loss, degradation and fragmentation of migratory bird habitat have been identified as the largest individual threat to migratory birds. Much of this loss results from humancaused by development. Birds need open, consistent areas and resources for: breeding, feeding, shelter, and survival, including access to food, water, and nesting sites. The size and connectivity of habitat (e.g. whether it is large and intact vs. fragmented and isolated) dictates whether or not the habitat will meet certain birds' needs.

Coyote Hills Trail plans should be revised to prevent segmenting bird habitat. Trails encircling a habitat area should minimize impacts to habitats and wildlife, many of which are protected special status species, as noted on diagram 4.1-3 in the DEIR.

Furthermore, Page 238 of the DEIR, Figure 2, Coyote Hills Land Use Plan Amendment (3-15-19) notes a future Fremont City park and an elementary school with up to 1100 students. Each of these elements appears adjacent to a trail into a habitat area. The DEIR fails to explain how that access will be managed, the number of additional visitors to that habitat and the associated impacts.

We also note that at Page 292 -- Approximately 5 miles of new trails would be constructed, along with up to six wildlife observation platforms. The trails, which would be constructed at grade, would allow increased public access to the visual resources at the site but would not substantially alter the site's visual characteristics. The viewing platforms, which would be elevated five to eight feet above adjacent grade at locations dispersed throughout the project site, would also increase publicly available views. The observation platforms would be visible from nearby and intermediate vantage points on the

SCSF1-9

SCSF1-

SCSF1-11

SCSF1 12

SCSF1-

13

site, but would not substantially alter the predominantly natural appearance of the expansion project site.	SCSF1- 13 (Cont.)
We further note that the DEIR and LUPA need to address these concerns regarding migrating birds:	SCSF1-
 Avoid activity that disturbs nesting behavior Jan to August¹ Conduct activities in accordance with the new California MBTA and all applicable state environmental laws.² 	14
• Mitigate for "operational impacts" to wildlife from farm activities	SCSF1- 15
• Because the baseline is heavily degraded from 150 years of agricultural practices, the focus should be on restoring the diverse habitats and designating the highest protection values under EBRPD's classifications for protected natural areas.	SCSF1- 16
• Avoid adding trails where special status species are known to occur.	SCSF1- 17
• Avoid disturbing sensitive species and special status species from recreational activities such as walking dogs, mountain biking, and related high-impact human activities.	SCSF1- 18
• A known problem: Without adequate enforcement, dogs will be off-leash, even with leash requirements. The realistic approach is to exclude dogs from high habitat value areas.	SCSF1- 19
• Avoid building trails in high habitat value areas.	SCSF1- 20

¹ p66 - 67

Most of the native bird species that occur in the region of the Coyote Hills Regional Park are covered by this Act; therefore, any activity related to restoration and/or public access improvements that is conducted during the nesting season (January 1 through August 31) must be implemented in a manner that complies with this Act.

² <u>https://oag.ca.gov/news/press-releases/attorney-general-becerra-and-california-department-fish-and-wildlife-issue-legal</u>

[&]quot;The California Department of Fish and Wildlife (CDFW) and California Attorney General Xavier Becerra jointly provide this advisory to affirm that California law continues to provide robust protections for birds, including a prohibition on incidental take of migratory birds, notwithstanding the recent reinterpretation of the Migratory Bird Treaty Act (MBTA) by the U.S. Department of the Interior (DOI)."

• Undertake comprehensive year-long bird surveys so that seasonal occupancy is documented in the surveys. The most recent bird surveys appear to be 2001 and 2007.	SCSF1- 21
• Protect burrowing owls from mountain biking and dogs. Identify burrowing owl habitat as high value sensitive habitat for this special status species and avoid building recreational trails in areas that should be restored and enhanced for burrowing owls.	SCSF1- 22
• Clearly identify and provide detailed plans for Wildlife and Protected Species Objectives in the LUPA p71. The objectives are presently too vague.	SCSF1- 23
• Implement a program for managing feral animal control, for exampled feral cats.	SCSF1
Farming Impact Issues	-24
In regard to farming and proposed demonstration farm activities, we note the following:	SCSF1- 25
1) Sea level rise raises doubts about farming row crops due to saline creep;	l
2) Planting and harvesting row crops does not sequester carbon;	SCSF1-
3) Deep-rooted vegetation, such as forage vegetation with controlled amount of grazing, or trees, is the best choice for permanently sequestering carbon;	SCSF1-
4) A Farm produce stand is quaint, but too limited in choices and is a money-loser. It doesn't add anything to the park experience or agricultural learning experience. Fruit trees would be a possible commercially-viable novelty that may justify the continued operation of the produce stand. Fruit trees would also add bird habitat value.	SCSF1- 28
According to the draft plan, the approximately 45-acre Historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway in this designated Agricultural Unit would continue to be used for small-scale, local agriculture crop production, including field and row crops, pasture and hay lands, and grazing. Pasture, hay and grazing (in the hay field) potentially offers environmental benefits, as described below, but continued row crop production does not.	SCSF1- 29
Comment #1 - <u>Sea level rise raises doubts about farming row crops due to saline creep.</u> Section 5.7, Climate Change and Sea Level Rise, contains contradictory statements. The section is introduced with this statement: "The Plan Area is not physically connected to San Francisco Bay and therefore will not be directly physically impacted by rising Bay tides, including extreme tides, with sea level rise." This statement is contradicted in the next paragraph where it says, "Climate change may result in [] the gradual rise of the shallow	SCSF1- 30

groundwater table associated with tidal affects on groundwater from the bay margin to the west and southwest. The shallow groundwater zone may also become more saline and alkaline over time, associated with the

influence of rising Bay tides." The section ends by saying, "... the long-term trend is anticipated to be a gradual rise in the shallow zone groundwater table, and increased shallow zone groundwater salinity and alkalinity."

Section 5.6, Surface and Groundwater Hydrology, has this to say about the shallowness of the farm area, which is located north of Ardenwood Creek: "A fresh to very slightly brackish shallow groundwater body occurs north of Ardenwood Creek and south of Patterson Ranch Road. This groundwater body is contained in fine grained alluvial basin deposits at depths ranging seasonally from 2 to more than 6 feet."

SCSF1-

(Cont.)

SCSF1-

SCSF1-

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For the time being, the soil is suitable for agriculture. Thirty years from now, after upward tidal influences have increased the salt content of the soil, it may not be suitable for commercially desirable row crops. It may then require extraordinary measures, such as soil amendments and irrigating with water from the local deepwater aquifer (which is not subject to saline intrusion), to continue growing such crops.

On the other hand, plants that thrive in saline conditions, such as forage crops for grazing animals, may be a more adaptive and adaptable vision for the farm land.

Trees are another option. Historically, at least half of the farm land unit was a willow grove, according Figure 5-11, Historic Creeks. The Western Wetland Natural Unit adjacent to the farm unit includes provisions for expanding and enhancing the willow and cottonwood stand. An alternative to row crops could be the extension of the willow and cottonwood stand onto the farm unit. Trees would permanently sequester carbon and also offer a cobenefit to wildlife such as birds.

Comment #2 - <u>Planting and harvesting row crops does not sequester carbon.</u> Table 6-2, LUPA Plan Summary, under the land use designation "Agricultural," the description of uses include "Agricultural, carbon farming." Carbon farming is a method of farming that reduces greenhouse gas impacts on the environment, as compared to conventional industrial farming. However, when it comes to sequestering carbon in the soil ecosystem, no farming at all is preferable to disturbing the soil and harvesting crops. It is at the root system and the surrounding microbes and fungi that carbon is sequestered. Removing the roots and exposing the biomass to sunlight ends up cancelling out the short-term carbon sequestration benefits that occur during the growing season.

Comment #3 - Deep-rooted vegetation, such as forage vegetation with controlled amount of grazing, or trees, is the best choice for permanently sequestering carbon. A study published by the University of Georgia in 2015, *"Farmland management changes can boost carbon sequestration rates,"* looked at improved carbon sequestration rates when row crop production was converted to pasture. *"What is really striking is just how fast these farms gain soil organic matter," said Aaron Thompson, associate professor of environmental soil chemistry and senior author on the study. <i>"In less than a decade, management-intensive grazing*

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restores these soils to levels of organic matter they had as native forests. These farms accumulate soil carbon at rates as fast as ever measured globally." Video <u>https://youtu.be/sqdZ8ydVXcM</u>

Whether grazing is involved or not, the simple fact is, permanently leaving roots in the ground is a superior method of sequestering carbon. Pulling out roots and tilling is counterproductive. And while cattle, for example, produce methane, a greenhouse gas, the cattle grazing would not have to be a permanent activity to permanently maximize the carbon sequestration achieved during the management-intensive phase. Having cattle grazing on selected areas of forage crops on a rotational basis and leaving other areas to continue growing, rather than harvesting the forage crops, which would undermine carbon sequestration, and transporting them to a feeding station elsewhere, could establish a robust carbon-sequestering root system that may someday no longer need cattle grazing to maintain. Hence, with cattle no longer required, the methane aspect of cattle grazing would be eliminated and no longer negatively affect the carbon score for the Historic Patterson Ranch Farm.

Comment #4 – <u>The farm produce stand adds no value to the park experience.</u> There is already a seasonal farm produce stand a few miles away at Ardenwood Historic Farm. As mentioned in Comments 1, 2, and 3 above, the row crop produce from Historic Patterson Ranch Farm that will be offered at this stand would represent climate ignorance. The food produced is not meeting an identified social need, such as being provided free of charge to a food bank, or addressing a shortage of food. There is no social or environmental benefit to maintaining a row crop farming operation on land that was historically low land connected to the Bay, which will eventually be compromised by saline intrusion. The farm produce stand could be justified if the farm acreage is converted to fruit trees. Otherwise, we recommend eliminating the produce stand in conjunction with eliminating row crop production.

Historic Cultural Resources

We see the benefit of the managed disturbances to the historical resources (Arden Dairy Milk house, and other historic properties) to preserve and protect them from sea level rise, etc. We also see the benefits to the public of learning about these resources and uses in the area. However, the DEIR fails to specify how these resources will be managed and protected once open to the public. We encourage the District to publish plans that describe all necessary steps the District will take to preserve the historic resources in the area, through managed levels of public access. The District has had difficulty enforcing Ord. 38 with respect to trail usage, curfews, bicycles, and dog leash rules. We recommend the District provide and implement a formal plan to manage visitation and ensure these resources are protected long-term.

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SCSF1-

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SCSF1-33

SCSF-34

SCSF1-35

Transportation

The largest sources of transportation-related greenhouse gas emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for more than half of the emissions from the transportation sector. EPA, Sources of Green House Gas Emissions:

https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions/

Coyote Hills Regional Park is entirely within in the City of Fremont.

In 2008, the Fremont City Council adopted a goal under its Climate Action Plan, to reduce greenhouse gas emissions 25% by 2020 from a 2005 baseline, as noted on page 9 of the plan, entitled, "The City Council's Plan for Reducing Green House Gas Emissions". <u>https://fremont.gov/DocumentCenter/View/19837/Climate-Action-Plan</u>

This goal is consistent with the emission reduction goals of other participants in the Alameda County Climate Protection Project. The City partnered with ICLEI—Local Governments for Sustainability for completion of the 2005 baseline greenhouse gas emission inventory, which revealed that the transportation sector contributed 60% of emissions. Chapter two (page 11) of the report "What can you do" (to support Climate action goals) lists as the first goal,

1. Drive Less. Walk, bike, take mass transit, carpool and combine errands.

The DEIR, however, fails to address how the LUPA intends to comply with these goals nor does it provide any specific plans for Coyote Hills to support and comply with the City of Fremont Climate Action plan.

Park usage nationwide is at all time highs causing traffic congestion, overwhelming infrastructure facilities, trails, etc. <u>https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks</u>

"We can't sit on our hands anymore. We have to come up with some kind of management plan to be able to preserve resources...."

In its recent announcement on Sunday, April 7, 2019, celebrating the Park District's 85th birthday by adopting "Free Fridays", one District representative in a KCBS interview asserted that the Park District receives more visitors collectively than Disneyland (hosting 25 million visits annually). Adding facilities to Coyote Hills Park will create "induced demand", encouraging more visitors to this already popular park. The DEIR acknowledges (page 309) after completion of the proposed "improvement/restoration" work, net new operational

SCSF1-36

SCSF1-37 GHG emissions would come primarily from the additional motor vehicles transporting increased numbers of visitors to the expanded Park.

Despite acknowledged increased vehicular traffic (DEIR p 309) and concurrent damage to habitat (p303), the DEIR fails to address how EBRPD intends to implement practices to manage both vehicular traffic and visitation to balance traffic congestion issues, reduce GHG/VMT, ensure public safety and minimize impacts to trail/habitats. Nor does the DEIR discuss when any of these yet identified mitigations would be implemented in relation to the opening of any new facilities. Implementation of practices to manage both vehicular traffic and visitation to balance traffic congestion issues, reduce GHG/VMT, ensure public safety and minimize impacts to trails/habitats must be in place before opening the new facilities at Coyote Hills.

We are encouraged to read the Climate Vision and the District's commitment to policies that protect and preserve the East Bay's green infrastructure. (Pg 75) notes:

8. Climate Change and Sea Level Rise Adaptation

There are four objectives that would be implemented in the LUPA and Park Development Plan

Regarding climate change adaptation:

4) Providing opportunities for active transportation to, from and within the Park by Constructing facilities for bicycle and pedestrian use, as well as accommodating transit where appropriate.

The DEIR notes the addition of at least 51 parking spaces at the Visitor Center, and on page 268 a 20 car and a 100 car parking lot. The Cumulative Impacts Analysis discusses added parking at the adjacent Dumbarton Quarry Park (pg 81-82), which notes a 13,000 s/f event center and a 150 seat amphitheater, but does not specify the number of parking spaces. The Cumulative impact analysis (p 63 on paper/ 81 PDF) also notes new office space "Campus Court" including 809,236 S/F of Corporate/professional space and a hotel, but the DEIR fails to include information regarding anticipated vehicle counts, impact to LOS, GHG/VMT.

What is the District doing to ensure direct access to this, (and all EBRP) Parks via convenient public transportation other than a personal vehicle (public transit, bike/ped)? What is the District's plan to comply with City of Fremont's Bicycle and Pedestrian Master Plans. The DEIR is silent on compliance.

Impact TRANS-1: Notes: The proposed Project would result in an increase in traffic
delays at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection.Sierra Club to EBRPD9Re: Coyote Hills DEIR.LUPA
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37 (Cont.)

SCSF1-

SCSF1-

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SCSF1-39

SCSF1-

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The DEIR notes (p 170) in "Transportation and Traffic", traffic counts were done June 23, 2017. The study fails to consider traffic impacts on summer weekend days (Sat. /Sun.) when park visitation tends to be at its peak. What are the traffic and overflow parking impacts to the surrounding area on a Saturday, Sunday or National holiday ?	SCSF1- 41 (Cont.)
The City of Fremont generally does restriping projects when roadway re-paving is scheduled to occur. Is this segment of roadway scheduled for restriping to meet the suggested mitigation before opening the added resources to the park? IF the restriping project is not completed before the anticipated completion date of the Coyote Hills Restoration how will EBRPD ensure public safety /visitor safety when accessing the park to meet Vision Zero best practices?	SCSF1- 42
How did EBRPD derive the one percent contribution as the "fair share" toward the cost of these improvements? The DEIR fails to consider the impacts of Facebook employees in their new facility in N. Fremont (south of the park area, south of Hwy 84), new Union City and Newark housing projects, the residents of which are likely to visit this nearby Regional Park. The District's contribution should not less than 50%.	SCSF1- 43
How many added vehicle trips are anticipated with full build out of all proposed Park facilities (Coyote Hills & Dumbarton Quarry), and housing projects currently approved in the surrounding area?	SCSF1- 44
Impact TRANS-2: The Proposed Project would increase use of the pedestrian and bicyclist crosswalk at Paseo Padre Parkway, which is not signalized.	
How does the proposed mitigation integrate with the City of Fremont Bicycle & Pedestrian Master Plans? Any impacts imposed on the City of Fremont should be fully mitigated by EBRPD. This might include funding to ensure a safety measure is completed before the opening of the park which will bring more bicycle/ped traffic to the area to ensure Vision Zero best practices are in place for public/visitor safety.	SCSF1- 45
How did EBRPD derive the one percent contribution as the "fair share" toward the cost of these improvements? The DEIR fails to consider the impacts of Facebook employees in their new facility in N. Fremont (south of the park area, south of Hwy 84), new Union City and Newark housing projects, the residents of which are likely to visit this nearby Regional Park. The District's contribution should not less than 50%.	SCSF1- 46
PAGE 171 (print on page 150) The CMP (County, Congestion Management Plan) establishes thresholds for designated roadways. For most projects, the Alameda CTC	

requirement for projects that generate more than 100 new peak hour trips because it is not considered a "local jurisdiction." We do not find this explanation reasonable or rationally based.

As part of a comprehensive Climate Action plan, the Park District must take a leadership role and do its part to reduce GHG/VMT by working to ensure multi-modal access to parks. We urge the District to work proactively with the City of Fremont and public transportation agencies to ensure safe, convenient access without need for a personal vehicle is in place for park visitors before additional facilities are open to the public.

DEIR 4.3 Transportation & Traffic (P 170 counter / labeled 150)

The District's DEIR outlines plans to increase parking for personal vehicles. Page 268 notes a 20 car and a 100 car parking lot. Page 292 notes a 100 car parking lot. The District consistently focuses on providing/encouraging park access by personal vehicle by providing or constructing new parking lots (DEIR P268, 292). Adding parking encourages the use of personal vehicles, increasing GHG/VMT. The DEIR acknowledges (page 309) "after completion of the proposed "improvement/restoration" work, net new operational GHG emissions would come primarily from the additional motor vehicles transporting increased numbers of visitors to the expanded Park."

The DEIR fails to address specifically how visitors can access the park without a personal vehicle, e.g. public transit (BART, AC transit and other transportation agencies), connectivity with City of Fremont Bicycle/Pedestrian Master Plans. What is the District's plan to comply with City of Fremont's Bicycle and Pedestrian Master Plans? The DEIR is silent on compliance.

The DEIR also fails to outline a District Climate Action goal to have X% of visitors access parks by public transit, bike, ped? Or what specifically EBRPD is doing to work with transit agencies and/or City Councils to ensure linkage to City Bike/Ped plans and/or development of public transit route that include access to EBRParks?

We note that the Sierra Club San Francisco Bay Chapter Transportation and Compact Growth Committee may provide additional comments on transportation issues.

CONCLUSION

We urge the Park District to revise the LUPA to improve focus on protection and preservation of: biological, historical, and cultural resources along with a focus on park access by means other than a personal vehicle. Specifically describe the measures and implementations to match visitor numbers to park capacity, address historical aspects, and provide transportation strategies/alternatives that **reduce** VMT/GHG and provide safe,

SCSF1-47 (Cont.)

SCSF1-48

SCSF1-49

SCSF1-50

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SCSF1-53 efficient multi-modal access other than by a personal vehicle. "Improving" access to parks should not have significant negative impacts to the endangered or special status species we are trying to protect or require a personal vehicle.

Thank you for considering our comments on these issues. We look forward to receiving your responses in the final EIR including options that incorporate environmentally superior options for wildlife, habitats and use of alternate/non-vehicular modes of transportation.

Sincerely yours,

Maman La Force

Norman La Force, Chair East Bay Public Lands Committee

Response to Comments SCSF1-1 through SCSF1-54

Response SCSF1-1

This comment provides general background information and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-2

See Responses SCSF1-3 through SCSF1-54.

Response SCSF1-3

CEQA requires an evaluation of the environmental impacts to biological resources of the Proposed Project, and identification of mitigation measures to reduce impacts to a less-than-significant level. The methods used to determine biological impacts, in the analysis of impacts in 4.1 Biological Resources, pages 65-129 of the Draft EIR, were appropriate and included a records search, field mapping, and a focused field review of potential biological impacts. Several potential adverse impacts were identified as a result, which would be avoided and/or minimized through a series of mitigation measures that the District will need to implement. The analysis in the Draft EIR and Initial Study is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required. Although the Park District may from time to time elect to perform a capacity study, such a study is uncommon. Because, as discussed above, mitigation measures identified in this EIR are sufficient to reduce Project impacts on biological resources, a capacity study is not necessary to address impacts to biological resources. Thus, a capacity study is not required under CEQA.

See also Response CNPS-2.

Response SCSF1-4

The analysis of impacts on biological resources, in section 4.1 (Biological Resources) of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The methods used to determine biological impacts were appropriate and included a records search, field mapping, and a focused field review of potential biological impacts. Several potential adverse impacts were identified as a result, which would be avoided and/or minimized with the implementation of mitigation measures. The Patterson Slough, an especially sensitive area of the project site, would be accessible only to Park staff, researchers, occasional visitors on guided tours, and mosquito and vector control technicians, as stated on page 92 of the LUPA. These restrictions, along with the mitigation measures identified in the Draft EIR, will mitigate Project impacts on biological resources to a less-than-significant level.

See also Response CNPS-2.

The Park District currently enforces its rules at the existing Coyote Hills Regional Park, adjacent to the Proposed Project site. If the Proposed Project is implemented, the Park District would extend enforcement of Ordinance 38 rules and regulations to include the Project area, but would not otherwise change existing policies or their enforcement. Enforcement of existing regulations is not considered to be a CEQA issue.

Response SCSF1-6

See Response SCSF1-5.

Response SCSF1-7

See Responses SCSF1-8 through SCSF1-54 below, and Responses SCSF2-1 through SCSF2-17 to Comment Letter SCSF2.

Response SCSF1-8

This comment provides general background information and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-9

The mission statement of the Park District is "The East Bay Regional Park District preserves a rich heritage of natural and cultural resources and provides open space, parks, trails, safe and healthful recreation and environmental education." In the past, the Park District has been successful in both preserving natural resources and providing recreation opportunities, which are not mutually exclusive. In keeping with the Park District's mission, the Project Description, on page 43 of the Draft EIR, identifies the general design and principles and planning objectives of the Proposed Project, which include:

• Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.

Response SCSF1-10

The Park District will manage vegetation and pest species within the Park expansion area in compliance with State and Federal law and in accordance with the District's Master Plan-Wildland Management Policies (1992, 2001 update), and its Pest Management Policies and Practices manual. This manual describes how the Park District implements its Integrated Pest Management Program (IPM). The IPM Program was discussed in the 2005 Coyote Hills Land Use Plan and CEQA document, and IPM practices in the Park expansion area are a continuation of this ongoing program. The IPM is implemented by the District's Stewardship Department and by appropriately licensed staff. Staff use all available tools in a coordinated, scientifically-based and safe manner to control pests, and meet health, safety and ecological goals, to ensure potential impacts associated with pest management are mitigated to a less than significant level.

Trail layout that potentially results in habitat fragmentation was considered in development of the Trail Plan. As discussed on page 124 of the Draft EIR, no new trails or other public access facility are proposed to be constructed within or across Patterson Slough that would bisect or fragment this existing riparian habitat. The proposed trail system does not encircle Patterson Slough. The majority of the proposed trails would be located in low-value, ruderal, or weedy habitat areas, not in areas to be restored as riparian or willow sausal habitat, as this habitat was considered too sensitive to allow public access. An existing trail and maintenance road on the west side of the Slough would be utilized for access to a wildlife observation platform that would be located outside of a 100 foot buffer from the slough's willow lined edge. No public access will be allowed beyond this point (See also CCCR-9, 12).

Response SCSF1-12

The proposed trail system near the Park and School site is within a currently ruderal weedy area and would be constructed concurrent with habitat restoration and enhancement of this area to the east of the slough. Many school groups within the greater Fremont area already utilize the Park for natural and environmental education programs, and the District's environmental education programs are expected to increase with the planned re-construction and up-grade of the existing Park Visitor Center.

Development of a school at the adjacent parcel is in early feasibility planning stages. The City of Fremont, Fremont Unified School District and State of California have not taken any action to proceed with constructing a school at this location. Nevertheless, if a school was developed at the adjacent parcel, District facilities and interpretive programs would be available for environmental education in coordination with school staff. School groups visiting the park typically range in size from 15-30 and visit parks during favorable weather conditions of fall and spring months when school is in session. School groups would be under the supervision of teachers, parent aids, and often accompanied by a District park naturalist, who ensure park rules are enforced and resources protected. Stewardship and resource protection is a common theme in outdoor classroom curriculum, which will ensure park rules are complied with and potential visitor impacts such as litter or off trail venturing are avoided. Furthermore, the project is designed with fencing and signage to keep all visitors on trail and park staff and stewardship managers have the discretion to temporarily close trails to protect resources should they become wet, eroded, or damaged, or during certain sensitive periods, such as if a nesting bird occupies a habitat tree too near a trail or wildlife observation platform.

Section 4.1 Biological Resources, on pages 65-129 of the Draft EIR, includes mitigation measures that would reduce all impacts on biological resources, including the area near the future City park and school site, to a less-than-significant level.

Response SCSF1-13

The commenter correctly notes that the observation platforms would not substantially alter the predominantly natural appearance of the project site. The comment is noted. The Park District will

consider this input prior to taking action on the EIR and LUPA. See also page 33 of Appendix A (Initial Study) of the Draft EIR.

Response SCSF1-14 through SCSF1-24

The commenter lists a number of concepts and design principles that they recommend be included in the LUPA and Park Development Plan. These concepts/principles are presented below with a response to each of them as follows:

Response SCSF1-14

Regarding avoidance of activity that disturbs nesting behavior and in accordance with new California MBTA and all applicable state environmental laws, see Mitigation Measure Bio-1d. Seasonal construction restrictions and other mitigation measures will be included in regulatory permit requirements, including compliance with the Migratory Bird Treaty Act. Construction seasonal restrictions will also be included in the Project Construction Documents and compliance will be monitored by an Independent Qualified Biologist.

Response SCSF1-15

Regarding mitigation of operational impacts, farming operations and activities are a historic use, part of the environmental baseline and existing conditions. The project will not intensify potential operational impacts associated with farming. The farming operation is subject to a lease agreement with enforceable terms for protecting park visitors and resources, including wildlife.

Response SCSF1-16

Restoring degraded agricultural lands is included in the project goals and objectives in section 6.2 of the LUPA which guided the formulation of the project description and LUPA and Park Development Plan.

Response SCSF1-17

New trails have avoided areas of known/currently occupied special status species; please refer to Draft EIR section 4.1, page 123. For example, new trails will be constructed in ruderal areas prior to or concurrently with habitat restoration and enhancement activities.

Response SCSF1-18

Mitigation Measure BIO-1a addresses potential impacts of recreational features. For example, new trails will be setback from sensitive areas with a minimum 100-foot buffer, fenced, and screened with native landscape plantings.

Response SCSF1-19

Regarding exclusion of dogs from high habitat value areas, see DEIR pages 42 and 119, and LUPA page 79, regarding the Special Protection Feature area (the existing and restored willow sausal and

mixed riparian forest, and existing and enhanced/restored wetland areas, including the Southern Wetlands Natural Unit). See also LUPA pages 27 to 28 regarding Policy Framework.

Response SCSF1-20

New trails have avoided areas of known/currently occupied Special Status species and sensitive communities, including Patterson Slough (please refer to Draft EIR page 124, third and fourth paragraphs). For example, new trails will be constructed in ruderal areas prior to or concurrently with habitat restoration and enhancement activities. See also Response SCSF1-17.

Response SCSF1-21

The project will not result in a significant impact on birds. See section 4.1, pages 112 to 113, of the Draft EIR. Nevertheless Park District staff, District biologists, and its Planning and Restoration and Public Access Design team continue to develop knowledge of the Project area, including seasonal use patterns, populations, and wildlife habitat relationships. The Park District, including its local park staff, District biologists, and its restoration design and biological consultant team have a comprehensive knowledge of the biological resources of the Project area, including important interactions among soils, hydrology and plant communities. The Project team's collective knowledge of the site biology, including short-term and long term changes, seasonal changes, species composition and diversity, habitat needs, and general population numbers, dates back more than 30 years (See also response GGAS-3).

These observations will continue as the Project Restoration and Enhancement Construction Plan (RECP) Bid Documents and the Habitat Mitigation and Monitoring Plan (HMMP) are developed and implemented, including monitoring for adaptive management. Volunteer groups may also engage in bird monitoring surveys.

Future surveys for biological resources are explained in Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1f, BIO-1g, BIO-1h, and BIO-1i. Completion of pre-construction, construction, and post-construction surveys is anticipated as part of regulatory permit requirements. Since the construction work would be phased over several seasons and years, the already comprehensive knowledge of wildlife use and bird occupancy would be expanded on during that period, and will be useful both in restoration design and adaptive management.

Response SCSF1-22

The potential impact to burrowing owls is discussed on pages 115 to 116 of the Draft EIR. Also see Mitigation Measure BIO-1g, which will reduce this potential impact to a less than significant level. As provided in Mitigation Measure BIO-1g, any burrowing owl habitat areas that are identified would be effectively protected by following generally accepted protocols for surveys , and methods for development and implementation of protection. habitat enhancement and management, burrow protection and artificial burrow creation. The project has been designed and mitigation measures developed to avoid and minimize trail impacts near the Burrowing Owl levee trail - where Burrowing Owls are most likely to occur. Burrowing owl survey methodology will closely follow recommended CDFW survey protocol, while mitigation measures for any active or occupied western burrowing owl burrow areas, will follow the recommendations in the CDFW Staff Report on Burrowing Owl Mitigation (Feb. 1, 2012). CDFW mitigation recommendations include: Habitat Assessment and Reporting Details, Breeding and Non-breeding Season Survey and Reports, Recommended Components for Burrowing Owl Artificial Burrow and Exclusion Plans, and Mitigation Management Plan and Vegetation Management Goal (see https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843)

CDFW biologists will be consulted during development and implementation of any needed western burrowing owl Mitigation Measures.

In addition, the City of Fremont has enacted standard development conditions for protection of burrowing owls as a part of their Municipal Code, that the Park District must also adhere to, that are generally complimentary with CDFW recommendations. The Park District has successful experience dealing with burrowing owls issues at several of its Regional Parks and Open Space areas.

Response SCSF1-23

Implementation of Wildlife and Protected Species Objectives is further developed in Chapter 7 of the LUPA, where acreage ranges of target land cover types are mapped and integrated into the overall Park Development Plan.

The LUPA Objectives and their analysis in the Draft EIR and Initial Study are at a level of detail sufficient to comply with CEQA and to inform the public and allow decision-makers to make informed decisions about the environmental impacts of the Project. The Park Development Plan concepts presented in the LUPA provide additional details that were used to develop the CEQA Project description, and to analyze potential impacts (see LUPA page 19 and DEIR page 43). Although the LUPA Objectives are not part of the CEQA document, the Park District Board of Directors, as part of their review and approval process, could revise the Objectives on page 71 of the LUPA to include additional habitat and wildlife objectives. The revised LUPA Objectives would be used in the subsequent development of the Restoration and Enhancement Construction Plan that would be part of the Project Implementation or Construction Bid Documents. Following are proposed draft LUPA Objective revisions(shown as underlined) for Board consideration:

1. Wetlands Objectives:

- a. Patterson Slough (Riparian) Consider habitat design to expand riparian area and expanding the channel to follow its historic alignment.
- b. Seasonal Freshwater Marsh Consider habitat design to expand and enhance wet meadow and creation of seasonal wetlands.
- c. Water Quality- Consider and continue to work with other local agencies in managing park lands to protect and improve surface water quality and shallow groundwater interactions, especially in wetlands and area within Patterson Slough.
- d. Consider management of residual pesticides in soils. Consider providing remediation of historic buildings and infrastructure, and close abandoned wells that have the potential to impact surface water and ground water quality.

2. Upland Objectives:

a. Transitional Areas – Consider habitat design to enhance transitional areas between ecological habitats.

- b. Coastal Prairie Consider habitat design to establish native grasslands.
- c. <u>Wildlife Corridor Consider protecting and expanding wildlife movement corridors and existing habitat patches to connect the Project area to wildlife refuges along San Francisco Bay.</u>

3. Wildlife Objectives:

- a. Bird Roosting Consider establishing bird roosting and foraging areas.
- b. Ground Nesting Birds Consider measures to protect ground nesting birds.
- c. <u>Feral Animals Consider establishing a program to control feral animals such as feral cats</u> non-native species such as red fox, and native species that are pests such as cowbirds, ground squirrels, and cowbirds.
- d. <u>Riparian and Emergent Marsh Dependent Special Status Bird Species (common yellow</u> throat, song sparrow, Swainson's hawk, tree swallow, tricolored blackbird, willow flycatcher, yellow-breasted chat, yellow warbler) Consider their habitat requirements in developing <u>Restoration Plan.</u>
- e. <u>Bats Consider developing and implementing a program to protect bat species, including providing artificial roosts within Patterson Slough.</u>

4. Protected Species Objectives:

- a. Western Burrowing Owl Consider improving nesting and foraging areas
- b. Northern Harrier Consider improving nesting and foraging habitat.
- c. White-tailed Kite Consider improving nesting and foraging habitat.
- d. Swainson's Hawk Consider improving nesting and foraging habitat.
- e. <u>Tri-colored Blackbird Consider improving nesting and foraging habitat.</u>

5. Invasive Weed Control Objectives:

a. Control Invasive Weeds – Consider establishing a program to control invasive weeds.

6. Public Access Objectives:

- a. Visual Access Consider improving views of the park from Paseo Padre Parkway.
- b. Park Operations Consider moving the Coyote Hills entrance kiosk closer to Paseo Padre Parkway.
- c. Picnic Area Consider providing non-reservable picnic sites.
- d. Mosquito Abatement Consider providing access to wet areas for County Mosquito Abatement.
- e. Wildlife Viewing- Consider providing elevated vista points for wildlife viewing.

Response SCSF1-24

Control of feral animals such as feral cats is an ongoing Program within Coyote Hills Regional Park and has been extended to include the Park expansion area. This will be a focus area of monitoring and adaptive management activities. Please refer to Summary of Project Objectives on LUPA page 71, and description of Wildlife Management on LUPA page 117.

The existing 2005 Coyote Hills LUP and IS/MND contains policies and programs to control feral animals including non-native red fox and feral cats, as well as other pest animals such as raccoons, skunks, ground squirrels, and other rodents. Park District IPM staff have the discretion to include other nuisance and pest animals, such as cowbirds to the list of target animals requiring control. Feral animal control using humane and IPM methods is an ongoing program that has been previously subject to CEQA review and has already been extended into the Park expansion area. (see also response SCSF1-10,and also Response SCSF1-23 for proposed LUPA expanded Objectives.

See Responses SCSF1-26 through SCSF1-29.

Response SCSF1-26

Saline creep, or the gradual bay water intrusion in shallow alluvial sediments containing groundwater, and the shallowing, and salinization of the near-surface groundwater table will occur gradually over the next 50 to 100-years associated with rise of bay tidal elevations or sea level rise. This is an existing condition which farming operations are currently subject to, independent of the proposed project. Since the area proposed for continued agriculture is the highest in elevation of the lands within the Project area, it is the least susceptible to saline creep and best located for optimal soil conditions to support farming into the future.

The commenter states that planting and harvesting row crops does not sequester carbon. The comment is noted, however several climate smart farming practices, such as compost addition to farmlands, and other healthy soil practices can reduce the Project's carbon footprint and will sequester atmospheric carbon.

As discussed on pages 50-51 of Appendix A (Initial Study) of the Draft EIR, the Proposed Project, which includes row crops and other agricultural activities in the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit (described on page 46 of the Draft EIR), would have a less than significant impact on greenhouse gas emissions.

Response SCSF1-27

The commenter states that deep-rooted vegetation, such as forage vegetation with a controlled amount of grazing, or trees, is the best choice for permanently sequestering carbon. The comment is noted. The Park District will consider this input prior to taking action on the EIR and LUPA. As stated in response SCSF1-26, the Proposed Project, which includes the agricultural activities described on page 46 of the Draft EIR, would have a less than significant impact on greenhouse gas emissions.

Response SCSF1-28

The commenter discusses the issues of commercial potential of the farm stand, the desirability of including a farm stand in the project, and the possibility of planting fruit trees. This comment does not question the adequacy of the information nor the analysis within the Draft EIR. The comment is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-29

The commenter states that raising pasture or hay and grazing (in the hay field) potentially offers environmental benefits but continued row crop production does not. The comment is noted. The Park District will consider this input prior to taking action on the EIR and LUPA. Row crop production is discussed further in Response SCSF1-31.

The commenter states that the EIR makes contradictory statements regarding the project site's susceptibility to sea level rise. The Project area is not directly subject to tidal inundation and rising tidal levels. It is indirectly affected both by increased tidal flood stages in lower Alameda Creek, through which Line P, Patterson Slough, and Crandall Creek drain (through the gates), and which will further slow drainage outflow, and by the effect of causing higher shallow zone groundwater levels and higher salinity/alkalinity.

The Historic Agricultural Unit south of Patterson Ranch Road and immediately west of Paseo Padre Parkway has the best agricultural soils with the greatest depth to a less brackish shallow groundwater zone. Currently the soil, drainage and climate conditions allow a wide choice of crops, with choice driven mostly by local market conditions. This area is least likely to be impacted by rising groundwater levels and increased salinity.

It is difficult to predict when climate change will require reconsideration and selection of moderately, then strongly, salt- and drainage-tolerant crops and forages, of which there are many to choose. Considering the small size of the field (45 acres), it is doubtful a drainage system could be economically installed to deal with the gradual rise of the shallow groundwater table and increased shallow zone groundwater salinity. Deep-rooted tree crops, including nut and stone fruits, which are drainage and salt sensitive, are unlikely to be successfully grown in this future environment.

Willow and cottonwood tree planting are proposed for a previously farmed area (the Western Wetlands Natural Unit) that are more susceptible to saline creep. Agricultural land use will continue at the area to the east of this area, and south of Patterson Ranch Road – areas less susceptible to saline creep. Continued farming of this area implements urban agriculture Project objectives, and was supported by many participants of the two community meetings held during Project planning, and was confirmed as an important objective by the Park District Board. The area proposed for continued farming contains the best agricultural soils and has the best drainage conditions of the Project area. Also see Response SCSF1-26.

Response SCSF1-31

The commenter presents a definition of carbon farming and describes the benefit of this type of farming. Other types of farming, such as those described in the comment, or cessation of farming at the site, may increase carbon sequestration. However, as noted in Response SCSF1-26, the project as proposed, which includes the agricultural activities described on page 46 of the Draft EIR, would have a less than significant impact on greenhouse gas emissions.

Response SCSF1-32 and SCSF1-33

The commenter describes the benefits of deep-rooted vegetation and grazing and how these practices improve carbon sequestration. As noted in response SCSF1-26, the project as proposed, which includes the agricultural activities described on page 46 of the Draft EIR, would have a less than significant impact on greenhouse gas emissions.

The commenter expresses an opinion regarding the desirability of including a farm stand in the project, its social impacts, and the possibility of planting fruit trees. These comments do not pertain to the adequacy of the environmental document evaluating the Proposed Project, but are noted. The Park District will consider this input prior to taking action on the EIR and LUPA. The comment will be forwarded to the EBRPD Board for its consideration prior to any decision on the Project.

The issue of row crops and carbon sequestration is also discussed in Response SCSF1-26.

Response SCSF1-35

The commenter acknowledges the value of managed disturbances to the historical resources to protect them from sea level rise and the value of educating the public about these resources. The commenter goes on to state that the DEIR fails to specify how the historical resources will be managed and protected once open to the public and encourages the District. The commenter encourages the District to provide and implement a formal plan to manage visitation and ensure these resources are protected long-term.

This EIR evaluates the potential environmental impacts of the project on the site's historical resources, and identifies feasible mitigation measures to reduce impacts to a less-than-significant level, with the exception of the significant unavoidable impacts of dismantling and removal of the Contractors Residence. Although no additional mitigation measures are available that will reduce the impacts of dismantling the Contractors Residence to a less-than-significant level, the EIR includes Mitigation Measure CUL-2a, which specifies that the structure will be documented by a qualified professional using professional standards. If the Proposed Project is implemented, the Park District would extend enforcement of its existing rules and regulations (Ordinance 38) to the project site, but would not otherwise change existing policies or their enforcement. Enforcement of existing regulations in not considered to be a CEQA issue.

The EIR analysis is at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

Response SCSF1-36

The commenter states that the DEIR fails to address how the LUPA intends to comply with the City of Fremont Climate Action Plan. The Proposed Project would provide over four miles of new hiking trails near a densely populated urban area, connections to the San Francisco Bay Trail, and a connection to the City of Fremont's proposed Dumbarton Bridge to Quarry Lakes and other regional trails. As discussed on page 197 of the Draft EIR, the project would be consistent with the GHG reduction goals of the City of Fremont *Climate Action Plan* for the following reasons. Project construction emissions would be short-term and would cease upon completion; thus, GHG from construction activities would only nominally contribute to GHG emissions impacts. Operation of the Project would contribute to global climate change through emissions of about 284 MT of GHG per year, which would be substantially below the BAAQMD's 1,100 MT/year significance threshold. In addition, the Project would be consistent with the GHG reduction goals of California's AB 32,

In addition, as provided in Mitigation Measure TRANSP-2, page 167 of the Draft EIR, the project would also contribute financially to intersection modifications that would improve pedestrian and bicycle access to the site. All of these project features would facilitate pedestrian and bicycle transportation in the project vicinity.

The Park District is also working with the Alameda-Contra Costa Transit District (AC Transit) on locating a bus stop near the Regional Park to facilitate public access to the Project site.

Response SCSF1-37

The commenter expresses concerns regarding GHG emissions from increased traffic to the Project site, and the Project's impact on habitat. The environmental impacts to biological resources, including habitat, of the Proposed Project, are evaluated in 4.1 Biological Resources, pages 65-129 of the Draft EIR. The methods used to determine biological impacts, biological were appropriate and included a records search, field mapping, and a focused field review of potential biological impacts. Several potential adverse impacts on habitat were identified as a result, which would be avoided and/or minimized through a series of mitigation measures that the District will need to implement.

As discussed on page 197 of the Draft EIR, and described in Response SCSF1-36, the project would be consistent with the GHG reduction goals of the City of Fremont *Climate Action Plan*. Further, pages 50-51 of Appendix A (Initial Study) of the Draft EIR explain that the Park District quantified the GHG emissions from increased traffic to the Project, and emissions would be below the Bay Area Air Quality Management District (BAAQMD) thresholds for CEQA significance. Thus, mitigation for GHG impacts is not required.

As discussed in Response SCSF1-36, above, the project would provide trails and pedestrian and bicycle safety improvements that would help reduce vehicular traffic and enhance public safety in the project vicinity.

Mitigation Measures TRANSP-1, on page 166 of the Draft EIR and TRANSP-2, on page 167 of the Draft EIR, identify measures necessary to reduce the project's impacts on traffic congestion, and pedestrian and bicycle access and safety, to a less-than-significant level.

The timing and implementation of these mitigation measures is identified in the Mitigation Monitoring and Reporting Program (MMRP) in Appendix 1.

Response SCSF1-38

This comment supports the DEIR's approach, and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-39

Cumulative transportation impacts of the Proposed Project are evaluated on pages 165-166 and 170-172 of the Draft EIR, and identify the impact to LOS of these cumulative projects. This analysis includes the projects mentioned in the comment. The cumulative impacts analysis for GHGs is provided on page 197 of the Draft EIR, which determined that Project GHG emissions would not exceed Bay Area Air Quality Management District thresholds, and therefore would result in a less-than-significant impact.

Response SCSF1-40

The City of Fremont Bicycle Master Plan is discussed on pages 153-155, and page 159 of the Draft EIR. The City of Fremont Draft Pedestrian Master Plan² includes the goals of increasing pedestrian activity, enhancing pedestrian safety, improving the pedestrian experience throughout Fremont, ensuring connectivity and accessibility for pedestrians, and planning new development to encourage walking. Although the City of Fremont's Pedestrian Master Plan is not specifically discussed in the Draft EIR, the Proposed Project, which would increase pedestrian activity, enhance pedestrian safety, improve the pedestrian experience, enhance connectivity and accessibility, and encourage walking in the Proposed Project, would be consistent with the goals of the Pedestrian Master Plan. The Draft EIR evaluated the Proposed Project's impacts on bicycle and pedestrian transportation and safety, at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, in 4.3 Transportation and Traffic. As discussed on page 170 of the Draft EIR, the project would not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

The issue of access to other Park District facilities is not pertinent to the environmental impacts of the Proposed Project, and is outside the scope of this EIR.

Response SCSF1-41

As discussed on page 162 of the Draft EIR, the park generates higher traffic on weekends, but maximum park impacts on traffic would occur during weekday peak periods, when overall traffic levels are highest. The Draft EIR evaluates traffic impacts using Level of Service (LOS), and thus focuses on impacts when traffic volumes on surrounding roadways are highest. Evaluation of project transportation impacts on weekend days would not provide meaningful information on maximum project transportation impacts in order to comply with CEQA. Focusing on the most critical timeframes when evaluating traffic impacts, as the Draft EIR did here, is permissible under CEQA. *See Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 245-46.

According to the CEQA Guidelines, impacts on parking are not a CEQA issue.

Response SCSF1-42

The Park District does not control the City of Fremont's scheduling of road restriping, although the Park District would coordinate with the City of Fremont on road striping. As discussed on page 167 of the Draft EIR, Mitigation Measure TRANSP-2 identifies measures necessary to reduce the project's impacts on pedestrian and bicycle access and safety to a less-than-significant level. The EIR's identified measures for transportation safety would be implemented before project completion in coordination with the City of Fremont to assure public safety when accessing the park.

² City of Fremont, Draft Pedestrian Master Plan, November 2016. Available on the internet at: https://fremont.gov/DocumentCenter/View/31990/Fremont_PedPlan_Final-Draft_November-2016_with-design-toolkit?bidId=

The commenter questions the EIR's conclusion that the Park District's fair share contribution for traffic mitigation should be one percent of the cost of traffic improvements. As discussed on page 166 of the Draft EIR, the Proposed Project's contribution to peak hour traffic is estimated at one percent of total peak hour traffic. Therefore, this is the appropriate contribution for the project to make toward the cost of pedestrian and bicycle improvements.

As discussed on page 164 of the Draft EIR, future year vehicle traffic forecasts used in the EIR were based on traffic forecasts reflecting General Plan build-out in the City of Fremont. These traffic forecasts include new Facebook employees in Fremont, and the share of traffic from nearby cities that passes through Fremont. Cumulative development in the project vicinity, and its associated transportation impacts, are discussed on pages 165-166 and 170-172 of the Draft EIR. Pedestrian and bicycle traffic generated by these projects is not an impact of the Proposed Project, and the Proposed Project is not required to mitigate these impacts.

Response SCSF1-44

The Draft EIR evaluates Level of Service (LOS), and thus specifically quantifying the number of added vehicle trips from cumulative projects is unnecessary. The impact on LOS of cumulative development in the project vicinity is shown in Table 4.3-6 on page 165 of the Draft EIR, and discussed on pages 165-167 and 170-172. Mitigation Measure TRANSP-1, on page 166 of the Draft EIR, identifies measures necessary to reduce the project's contribution to vehicle traffic delays to a less-than-significant level.

Response SCSF1-45

The City of Fremont Bicycle Master Plan is discussed on pages 153-155, and page 159 of the Draft EIR. The City of Fremont Draft Pedestrian Master Plan³ has the goals of increasing pedestrian activity, enhancing pedestrian safety, improving the pedestrian experience throughout Fremont, ensuring connectivity and accessibility for pedestrians, and planning new development to encourage walking. The Proposed Project, which would increase pedestrian activity, enhance pedestrian safety, improve the pedestrian experience, enhance connectivity and accessibility, and encourage walking in the Proposed Project, would be consistent with the goals of the City of Fremont's Pedestrian Master Plan. The Draft EIR evaluated the Proposed Project's impacts on bicycle and pedestrian transportation and safety, at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, in 4.3 Transportation and Traffic. As discussed on page 170 of the Draft EIR, the project would not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

³ City of Fremont, Draft Pedestrian Master Plan, November 2016. Available on the internet at:

https://fremont.gov/DocumentCenter/View/31990/Fremont_PedPlan_Final-Draft_November-2016_with-design-toolkit?bidId=

Mitigation Measure TRANSP-2, on page 167 of the Draft EIR, identifies measures necessary to reduce the project's contribution to impacts on pedestrian and bicycle access and safety to a less-than-significant level.

Response SCSF1-46

As discussed on page 166 of the Draft EIR, the Proposed Project's contribution to peak hour traffic is estimated at one percent. Therefore, this is the appropriate contribution for the project to make toward the cost of pedestrian and bicycle improvements.

As discussed on page 164 of the Draft EIR, future year vehicle traffic forecasts used in the EIR were based on traffic forecasts reflecting General Plan build-out in the City of Fremont. These traffic forecasts include new Facebook employees in Fremont, and the share of traffic from nearby cities that passes through Fremont. Cumulative development in the project vicinity and its associated transportation impacts, are discussed on pages 165-166 and 170-172 of the Draft EIR. Pedestrian and bicycle traffic generated by these projects is not an impact of the Proposed Project, and the Proposed Project is not required to mitigate these impacts.

Response SCSF1-47

As stated on page 150 of the Draft EIR, and noted in the comment, the Park District is not subject to the CMP requirement for projects that generate more than 100 new peak hour trips because the District is not considered a "local jurisdiction" per Alameda County Transportation Commission. The commenter states that Sierra Club does not find this policy reasonable or rationally based. The comment is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-48

The comment does not question the adequacy of the information nor the analysis within the Draft EIR, and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

However, the Park District is working to provide multi-modal access to the park. As discussed in Response SCSF1-36, the Proposed Project would provide new hiking trails, connections to the San Francisco Bay Trail, a connection to the City of Fremont's proposed Dumbarton Bridge to Quarry Lakes and other regional trails, and would contribute to intersection modifications that would improve pedestrian and bicycle access to the site. All of these project features would facilitate pedestrian and bicycle transportation, and help reduce vehicle use, in the project vicinity.

As discussed on page 170 of the Draft EIR, the project would not conflict with existing or planned public transit facilities.

Response SCSF1-49

As discussed in Response SCSF1-36, the Proposed Project would provide new trails and trail connections, and contribute to intersection modifications that would improve pedestrian and bicycle

access to the site. The Park District is working with the Alameda-Contra Costa Transit District to locate a bus stop near the Regional Park. All of these project features would facilitate pedestrian and bicycle transportation, and help reduce vehicle use, in the project vicinity. As discussed on pages 50-51 of Appendix A of the Draft EIR, the Proposed Project would have a less than significant impact on greenhouse gas emissions.

The commenter's specific suggestions related to the parking component of the Project are noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-50

Consistency with the City of Fremont Bicycle Master Plan is discussed on pages 153-155, and page 159 of the Draft EIR. The City of Fremont Draft Pedestrian Master Plan⁴ has the goals of increasing pedestrian activity, enhancing pedestrian safety, improving the pedestrian experience throughout Fremont, ensuring connectivity and accessibility for pedestrians, and planning new development to encourage walking, Although the City of Fremont's Pedestrian Master Plan is not specifically discussed in the Draft EIR, the Proposed Project, which would increase pedestrian activity, enhance pedestrian safety, improve the pedestrian experience, enhance connectivity and accessibility, and encourage walking in the Proposed Project, would be consistent with the goals of the Pedestrian Master Plan. The Draft EIR evaluated the Proposed Project's impacts on bicycle and pedestrian transportation and safety, at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, in 4.3 Transportation and Traffic. As discussed on page 170 of the Draft EIR, the project would not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

The analysis of project impacts on alternative transportation is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

The comment regarding desirability of additional planning for alternative transit to the Proposed Project is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-51

The commenter states that the DEIR fails to outline a District Climate Action goal specifying that a certain percentage of visitors would access parks by public transit, bike, or on foot. The commenter also asks what the District is specifically doing to work with transit agencies and/or City Councils to ensure linkage to City Bike/Pedestrian plans and/or development of public transit routes that include access to EBRPD parks.

There is no requirement under CEQA for the Park District to have a climate action goal. In any case, as discussed on pages 50-51 of Appendix A of the Draft EIR, the Proposed Project would have a less than significant impact on greenhouse gas emissions. As discussed in Response SCSF1-

⁴ City of Fremont, Draft Pedestrian Master Plan, November 2016. Available on the internet at:

 $https://fremont_gov/DocumentCenter/View/31990/Fremont_PedPlan_Final-Draft_November-2016_with-design-toolkit?bidId=$

36, the Proposed Project would provide new trails and trail connections, and contribute to intersection modifications that would improve pedestrian and bicycle access to the site. The Park District is working with the Alameda-Contra Costa Transit District to locate a bus stop near the Regional Park. All of these project features would facilitate pedestrian and bicycle transportation, and help reduce vehicle use, in the project vicinity.

The analysis of project impacts on greenhouse gas emissions and alternative transportation access to the proposed park expansion is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

The comment regarding desirability of a Park District climate action goal will be forwarded to the EBRPD Board for its consideration prior to any decision on the Project.

Response SCSF1-52

The commenter states that additional comments on transportation issues may be submitted by Sierra Club San Francisco Bay Chapter Transportation and Compact Growth Committee. The comment is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF1-53

This EIR evaluates the potential environmental impacts of the Project, and identifies mitigation measures as necessary to reduce impacts of a less-than-significant level, with the exception of the significant unavoidable impact of dismantling and removal of the Contractors Residence, for which no mitigation measures are available to reduce the impact to a less-than-significant level. The significant unavoidable impact of dismantling and removal of the Contractors Residence would not be altered by a different focus on park access as advocated in the comment.

The comment regarding project design will be forwarded to the EBRPD Board for its consideration prior to any decision on the Project.

Response SCSF1-54

Chapter 5 Alternatives, on pages 173-192 of the Draft EIR, evaluates alternatives to the project, and identifies the Environmentally Superior Alternative on pages 190-191. A public hearing will be held at an EBRPD Board meeting following publication of the Final EIR, containing responses to all comments submitted on the Draft EIR. Certification of the EIR and adoption of the project will be considered at that meeting.

Notice of the meeting will be sent to the same parties that were notified of the publication of the Draft EIR and any additional parties that request notification.

Sierra Club, San Francisco Bay Chapter (N. La Force, 2)



San Francisco Bay Chapter Serving Alameda, Contra Costa, Marin and San Francisco Counties

April 21, 2019

Via email: kcuero@ebparks.org

Ms. Karla Cuero East Bay Regional Park District Acquisition Stewardship and Development Division 2950 Peralta Oaks Court PO Box 5381Oakland, CA 94605

SUBJECT: DEIR - Coyote Hills Restoration and Public Access Project/ SCH # 2018062002

Dear Ms. Cuero,

The Sierra Club has further comments regarding this LUPA and DEIR focused on transportation.

SCSF2-

2

Transportation

The largest sources of transportation-related greenhouse gas emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for more than half of the emissions from the transportation sector. EPA, Sources of Green House Gas Emissions: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions/

Coyote Hills Regional Park is entirely within in the City of Fremont. In 2008, the Fremont SCSF2-City Council adopted a goal under its Climate Action Plan, to reduce greenhouse gas emissions 25% by 2020 from a 2005 baseline, as noted on page 9 of the plan, entitled, "The

City Council's Plan for Reducing Green House Gas Emissions". https://fremont.gov/DocumentCenter/View/19837/Climate-Action-Plan

This goal is consistent with the emission reduction goals of other participants in the Alameda County Climate Protection Project. The City partnered with ICLEI—Local Sierra Club to EBRPD Re: Coyote Hills DEIR.LUPA Further Comments April 21, 2019

Governments for Sustainability for completion of the 2005 baseline greenhouse gas emission inventory, which revealed that the transportation sector contributed 60% of emissions. Chapter two (page 11) of the report "What can you do" (to support Climate action goals) lists as the first goal:

SCSF2-2 (Cont.)

1. Drive Less. Walk, bike, take mass transit, carpool and combine errands.

The District's DEIR, however, fails to address how the LUPA intends to comply with these goals, nor does it provide specific plans for how Coyote Hills Regional Park will support and comply with the City of Fremont Climate Action plan. The DEIR must address these goals not only because they are the goals of the City of Fremont in which this park unit lies, but also because the Park District has maintained that it seeks to do its part in reducing greenhouse emissions and reducing the impacts of climate change.

Park usage nationwide is at all time highs, causing traffic congestion, overwhelming infrastructure, facilities, trails, etc. <u>https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks</u>:

"We can't sit on our hands anymore. We have to come up with some kind of management plan to be able to preserve resources...." John Marciano, a spokesman for Zion. In the end, Marion says, "they have to limit use. We think these parks can handle an infinite number of people, and they can't." (Jeffrey Marion, a recreation ecologist at Virginia Tech).

The impacts of heavy visitation in EBRParks is no different, impacting both the trails & habitats inside the park and the roads in the communities outside the parks. In its recent announcement on Sunday, April 7, 2019, celebrating the Park District's 85th birthday by adopting "Free Fridays", one District representative in a KCBS interview asserted that the Park District receives more visitors collectively than Disneyland (hosting 25 million visits annually). Adding facilities to Coyote Hills Regional Park will create "induced demand", encouraging more visitors to this already popular park. The DEIR acknowledges (page 309) after completion of the proposed "improvement/restoration" work, net new operational GHG emissions would come primarily from the additional motor vehicles transporting increased numbers of visitors to the expanded Park.

Despite acknowledged increased vehicular traffic (DEIR p 309) and concurrent damage to habitat (p303), the DEIR fails to address how EBRPD intends to implement practices to manage both vehicular traffic and visitation. The DEIR must state plans to balance traffic congestion issues, reduce GHG/VMT, ensure public safety and minimize impacts to trail/habitats. Nor does the DEIR specify when any of these as yet identified mitigations would be implemented. Implementation of practices to manage both vehicular traffic and visitation, reduce GHG/VMT, ensure public safety

SCSF2-

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and minimize impacts to trails/habitats must be in place before opening any new facilities at Coyote Hills Regional Park .	SCSF2- 3 (Cont.)
We are encouraged to read in the DEIR the Climate Vision and the District's commitment to policies that protect and preserve the East Bay's green infrastructure. (Pg 75) notes:	
8. Climate Change and Sea Level Rise Adaptation There are four objectives that would be implemented in the LUPA and Park Development Plan Regarding climate change adaptation:	SCSF2- 4
4) Providing opportunities for active transportation to, from and within the Park by Constructing facilities for bicycle and pedestrian use, as well as accommodating transit where appropriate.	
However, the DEIR notes the addition of at least 51 parking spaces at the Visitor Center, and on page 268 a 20 car and a 100 car parking lot. The Cumulative Impacts Analysis discusses added parking at the adjacent Dumbarton Quarry Park (pg 81-82), which notes a 13,000 s/f event center and a 150 seat amphitheater, but does not specify the number of parking spaces. The Cumulative impact analysis (p 63 on paper/ 81 PDF) also notes new office space "Campus Court" including 809,236 S/F of Corporate/professional space and a hotel, but the DEIR fails to include information regarding anticipated vehicle counts, impact to LOS, GHG/VMT from these potential sources. The DEIR must include traffic analysis that considers cumulative impacts from all adjacent sources including those under construction in order to inform the public of the full impact of the project.	SCSF2- 5
The Climate Vision states the District will provide opportunities for active transportation but fails to provide details about what the District is doing to ensure direct access to Coyote Hills Regional Park, (and all EBRParks) via public transportation. The addition of parking lots simply encourages access by personal vehicle. Adding parking lots fails to demonstrate a commitment to the District's Climate Vision or protect and preserve the East Bay's green infrastructure.	SCSF2- 6
Impact TRANS-1: Notes: The proposed Project would result in an increase in traffic delays at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection.	
The DEIR notes (p 170) in "Transportation and Traffic", traffic counts were done Friday, June 23, 2017. The study fails to consider traffic impacts on weekend days (Sat. /Sun.) when park visitation is consistently higher. What are the traffic and overflow parking impacts to the surrounding area on a Saturday, Sunday or National holidays? The DEIR	SCSF2- 7
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SCSF2fails to include traffic data from days when the Park is busy thus failing to inform the public 7 of the full impact of the project. (Cont.)

The City of Fremont generally does restriping projects when roadway re-paving is scheduled to occur. Is the segment of roadway near the entrance to Coyote Hills Regional Park scheduled for restriping to meet the suggested mitigation before opening the additional SCSF2resources to the park? The DEIR fails to address how EBRPD will ensure public safety 8 /visitor safety when accessing the park to meet Vision Zero best practices if the restriping project is not completed before the anticipated completion date of the Coyote Hills restoration.

The DEIR fails to provide estimates and mitigations for the total number of added vehicle trips anticipated with the full build out of all proposed Park facilities (Coyote Hills & Dumbarton Quarry), and all other business and housing projects currently approved in the surrounding area, including nearby Newark housing projects, the residents of which are likely to visit this nearby Regional Park.

Impact TRANS-2: The Proposed Project would increase use of the pedestrian and bicyclist crosswalk at Paseo Padre Parkway, which is not signalized.

The DEIR fails to address how the District plans to comply with the City of Fremont SCSF2-Bicycle & Pedestrian Master Plans. Any impacts imposed on the City of Fremont should be fully mitigated by EBRPD. This might include funding to ensure a safety measure is completed before the opening of the park which will bring more bicycle/ped traffic to the area to ensure Vision Zero best practices are in place for public/visitor safety.

PAGE 171 (print on page 150) The CMP (County, Congestion Management Plan) establishes thresholds for designated roadways. For most projects, the Alameda CTC Technical & Policy Guidelines uses a 100-trip PM Peak (increase) threshold, which if exceeded, would require a detailed traffic study. The Park District is not subject to this requirement for projects that generate more than 100 new peak hour trips because it is not considered a "local jurisdiction". Regardless of whether the EBRParks is a "local jurisdiction," it should addess in the LUPA and DEIR how it will meet these requirements or that it will actually exceed them. The science of climate change is very clear, individual governmental entities cannot duck an issue concerning climate change on the grounds that the needs or requirements are somehow legally and technically "not in their jurisdiction." This is ducking issue.

As part of a comprehensive Climate Action Vision, the Park District must take a leadership role to reduce GHG/VMT by working to ensure multi-modal access to parks. The DEIR fails to outline these steps. We urge the District to work proactively with the City of Fremont and public transportation agencies to ensure safe, convenient access Sierra Club to EBRPD Re: Coyote Hills DEIR.LUPA Further Comments April 21, 2019

SCSF2-12

SCSF2-

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SCSF2-11

without need for a personal vehicle is in place for park visitors before additional facilities are SCSF2-12 open to the public. (Cont.)

DEIR 4.3 Transportation & Traffic (P 170 counter / labeled 150)

The District's DEIR outlines plans to increase parking for personal vehicles. Page 268 notes a 20 car and a 100 car parking lot. Page 292 notes a 100 car parking lot. The District consistently focuses on encouraging park access by personal vehicle by providing or SCSF2constructing new parking lots (DEIR P268, 292). Adding parking encourages the use of 13 personal vehicles, increasing GHG/VMT. The DEIR acknowledges (page 309) "after completion of the proposed improvement/restoration work, net new operational GHG emissions would come primarily from the additional motor vehicles transporting increased numbers of visitors to the expanded Park."

The DEIR fails to address specifically how visitors can access the park without a personal vehicle, e.g. public transit (BART, AC transit and other transportation agencies), or SCSF2-14 connectivity with City of Fremont Bicycle/Pedestrian Master Plans.

The DEIR also fails to outline a District Climate Vision goal to have X% of visitors access parks by public transit, bike, pedestrian. The DEIR fails to state specifically what SCSF2-EBRPD is doing to work with transit agencies and/or City Councils to ensure linkage to 15 City of Fremont Bike/Ped Master Plans and/or development of public transit routes that include access to Coyote Hills Regional Park.

CONCLUSION

The DEIR must include details of how the District will address these issues. The project scope must be revised to improve focus on protection and preservation of: biological, historical, and cultural resources along with a focus on park access by means other than a personal vehicle. The DEIR must specifically describe the measures and SCSF2implementations to match visitor numbers to park capacity, address historical aspects, and 16 provide transportation strategies/alternatives that reduce VMT/GHG and provide safe, efficient multi-modal access other than by a personal vehicle. "Improving" access to parks should not have significant negative impacts to the endangered or special status species we are trying to protect or require a personal vehicle.

Thank you for considering our comments on these issues. We look forward to receiving your responses in the final EIR including options that incorporate environmentally SCSF2-17 superior options for wildlife, habitats and use of alternate/non-vehicular modes of transportation.

Sincerely yours,

Marran La Face

Norman La Force, Chair East Bay Public Lands Committee

Response to Comments SCSF2-1 through SCSF2-17

Response SCSF2-1

The comment provides general background information and does not question the adequacy of the information nor the analysis within the Draft EIR, and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SCSF2-2

See Response SCSF1-36.

Response SCSF2-3

See Response SCSF1-37.

Response SCSF2-4

See Response SCSF1-38.

Response SCSF2-5

See Response SCSF1-39.

Response SCSF2-6

See Response SCSF1-40. The comment regarding the desirability of including parking in the Proposed Project is noted and will be forwarded to the EBRPD Board for its consideration prior to any decision on the Project.

Response SCSF2-7

As discussed on page 162 of the Draft EIR, the park generates higher traffic on weekends, but maximum park impacts on traffic would occur during weekday peak periods, when overall traffic levels are highest. The Draft EIR evaluates traffic impacts using Level of Service (LOS), and thus focuses on impacts when traffic volumes on surrounding roadways are highest. Evaluation of project transportation impacts on weekend days would not provide meaningful information on maximum project transportation impacts in order to comply with CEQA. Focusing on the most critical timeframes when evaluating traffic impacts, as the Draft EIR did here, is permissible under CEQA. See Clover Valley Foundation v. City of Rocklin (2011) 197 Cal. App. 4th 200, 245-46.

According to the CEQA Guidelines, impacts on parking are not a CEQA issue.

Response SCSF2-8

See Response SCSF1-42.

Response SCSF2-9

See Response SCSF2-44.

Response SCSF2-10

See Response SCSF1-45.

Response SCSF2-11

See Responses SCSF1-36, SCSF1-37, and SCSF1-47.

As stated on page 150 of the Draft EIR, and noted in the comment, the Park District is not subject to the CMP requirement for projects that generate more than 100 new peak hour trips because the District is not considered a "local jurisdiction" per Alameda County Transportation Commission. Therefore, the Park District is not subject to the CMP, and a detailed traffic study per the County Transportation Commission guidelines, as mentioned in the comment, is not required to comply with CEQA. The project is expected to generate 28 AM and 48 PM peak hour trips (Table 4.3-3 of the Draft EIR), which is below the CMP threshold.

Response SCSF2-12

See Response SCSF1-48.

Response SCSF2-13

See Response SCSF1-49.

Response SCSF2-14

See Response SCSF1-50.

Response SCSF2-15

See Response SCSF1-51.

Response SCSF2-16

See Response SCSF1-53.

Response SCSF2-17

See Response SCSF1-54.

California Native Plant Society



CALIFORNIA NATIVE PLANT SOCIETY

East Bay Chapter, www.ebcnps.org PO Box 5597, Elmwood Station, Berkeley, CA 94705

April 22, 2019

Karla Cuero East Bay Regional Park District Acquisition, Stewardship, and Development Division 2950 Peralta Oaks Court Oakland, CA 94605

via email:kcuero@ebparks.org

The East Bay chapter of the California Native Plant Society (EBCNPS) submits these comments on the draft land use plan amendment (LUPA) and draft environmental impact report (DEIR) for the East Bay Regional Park District's (EBRPD) project entitled "Coyote Hills Restoration and Public Access Project" dated March 7, 2019 (SCH #2018062002).

As avid supporters of the open space that provides habitat for locally native plants and animals, we applaud the goals of the LUPA, including the plans for minimal-disturbance development, native plant restoration in areas that have been altered by human activity, improvement of native habitat values, and ongoing management of invasive weed species.

Thank you for the opportunity to comment. The DEIR's baseline description of botanical resources and key mitigation measures is inadequate. We request that these be corrected in the Final EIR. Doing so should also help achieve greater success on the important goals of the project. Our comments are as follows:

1) Inadequate description of baseline Biological Resources

There are several significant gaps in the DEIR baseline information on biological resources. Baseline botanical information is required to inform the environmental analysis and to avoid, minimize, or compensate for impacts to these resources. CNPS-1

- a. The DEIR presents a list of several "previous general reports on the biological resources of the Project" (DEIR, pg. 102), but the listing of previous studies does not provide sufficient accompanying information on the nature, timing, and results of these previous studies for rare plants and plant communities. The reports, or report summaries, are also not available in the DEIR appendix.
- b. The DEIR also states that "Jane Valerius conducted special status plant surveys for the Southern Wetlands Natural Unit, south of Ardenwood Creek on September 1, 2016. A list of special status plant species reported in the CNDDB was compiled and reviewed prior to the field surveys. Observations for potential rare plants for the remain(der) of the Project area were completed by Valerius associated with preliminary jurisdictional wetlands fieldwork." (pg DEIR, 102-103).

However, the LUPA states that "No rare plants were observed during the field work conducted for the preliminary wetlands determination for the Plan Area north of Ardenwood Creek, *but a thorough botanical survey was not completed*" (italics added, LUPA, pg. 59).

Due to the limited information in the DEIR, were any comprehensive and floristic botanical surveys completed following CDFW botanical protocols in the Project Area north of the "Southern Wetlands Natural Unit" projec, what specific areas were surveyed, and what are the results?

- c. The LUPA discussion of Oak Woodland sensitive plant communities (LUPA, pg. 49) indicates that "native California grasses and non-native grasses, and forbs" were located in the remnant Oak woodland; however, only non-native naturalized weedy grasses are listed. This section also states that this remnant oak woodland has a "unique character for consideration as potential habitat expansion associated with oak savanna restoration and enhancement planning." There is no information indicate whether the the native grasses, as well as any native forbs, were surveyed for meeting the criteria of a sensitive plant community. If this is not the case, at least a list of the native grass species growing here should be provided in the LUPA and DEIR, too.
- d. The LUPA describes the "Ruderal Grassland" habitat (LUPA, pg. 41 as covering a significant amount of the project area (LUPA map, pg. 41-42). It also states that "this biological community is characterized by a mixture of some native, but mostly non-native species including grasses, forbs, and shrubs." In addition, the LUPA states "During previous rare plant surveys conducted within the Park Expansion Project Area as part of the proposed Patterson Ranch Development Project EIR, no rare plants were observed. The authors of the EIR thought Special Status plants were unlikely to be present in ruderal and weedy fallow farm fields or agricultural lands. No rare plants were observed during the field work conducted for the preliminary wetlands determination for the Plan Area north of Ardenwood Creek, but a thorough botanical survey was not completed" (LUPA, pg. 59).

CNPS-4

CNPS-5

CNPS-6

Information on the cover characteristics of these species is needed to determine if a remnant patch or section meets the membership criteria as a rare plant community alliance (Manual of California Vegetation, Second Edition).

Also, information on the nature and species of native grasses, such as remnant patches or scattered species, could indicate what other native annual forb or bulbs may be present, as well as the soil type and land typography, to inform plans for the large area that is to be converted to native grassland.

e. Other than referring to the CNPS "Unusual and Rare Plants for Alameda and Contra Costa Counties" (Dianne Lake) for locally-rare plants associated with wetlands (DEIR, pg. 100), there is insufficient information provided about how, or if, other non-wetland, locally-rare plants were surveyed in the total Project Areas to satisfy the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities."

Note: per 15125 (c) of the 2019 CEQA Guidelines, "Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context."

f. The 2005 LUP and accompanying CEQA documents reported six special status plant species within the existing, adjoining Coyote Hills Regional Park but there is insufficient information to determine if these rare plants were surveyed using well-timed, protocol-level surveys within the LUPA Project Area.

In sum, there is insufficient information in the DEIR or LUPA to determine a) where surveys for rare plants and sensitive plant communities were conducted and b) if any of the surveys followed the CDFW Protocols for comprehensive, floristic surveys.

Thus, there is insufficient information in the LUPA and DEIR to describe the baseline information on special status plants and sensitive plant communities for subsequent impact analysis. For surveys that were completed, it is unknown if comprehensive floristic surveys were performed following CDFW plant survey protocols (Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, CA Dept. of Fish and Wildlife, March 2018) and CNPS protocols (<u>CNPS Botanical Survey Guidelines</u>, CNPS, June 2001).

There is insufficient information to determine *where* surveys were done within the greater Project Area. We have assembled a table of listed reports and surveys to try to determine which reports/survey covers which part of the Project Area, and what the nature of the survey

3

CNPS-6 (Cont.)

CNPS-8

CNPS-7

was (Appendix - Table 1). Botanical surveys need to be comprehensive and floristic, at different times, from representative locations, especially due to the numerous biological/ecological communities recognized within the LUPA Project Area.

The FEIR therefore needs to include a sufficient baseline information on special status plants and sensitive plant communities within the Project Areas, and on the nature and location of surveys consistent with the CDFW botanical survey protocols.

Adequate baseline botanical information also has a practical benefits....while the LUPA and DEIR note that the much of the existing landscape in the Project Area has been heavily disturbed by previous uses, special status plant species or sensitive plant communities that are surveyed, located, and fully described would also help inform the land use plan's intent to convert major portions of the site back to their natural native plant communities.

2) Inadequate Mitigation Measures

As discussed above, the baseline biological resources information to evaluate impacts to plant biological resources is inadequate. Without adequate information or surveys on the biological resources that would be impacted by the proposed project, and where the plant resources are, the DEIR cannot provide adequate information on how impacts to rare and threatened plants and locally-rare plants and sensitive plant communities would be avoided, minimized, or compensated for. Appropriately timed, floristic, and comprehensive botanical surveys of the entire project area should be conducted and made available for public review prior to the final LUPA and EIR, and ideally, in the future, for the public input workshops, too.

- a. The DEIR instead proposes to defer the baseline botanical surveys as a mitigation measure at "pre-construction," after plans have already been developed (per Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species, DEIR, pg. 110). Thus, rather than establish baseline botanical information to analyze impacts to plant resources to mitigate for those impacts in the LUPA and EIR, the EIR would primarily rely on protocol level surveys just prior to construction. While "pre-construction surveys" are needed and valuable, relying on them just prior to construction defers EIR analysis and mitigation for impacts and takes place outside of public review and comment.
- b. It is unclear what the overlap, distinction, or practical application is between mitigation measures Bio-1b and Bio-1c: Measure BIO-1b, Project-wide: Prepare and Implement a Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and Jurisdictional Wetlands, and Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species (DEIR pg 16-17, and repeated elsewhere).

Both mitigation measures are written to address impacts to special status plant species prior to construction, but the former reads like a less rigorous, or "mitigation lite",

CNPS-9 (Cont.)

CNPS-10

CNPS-11

version of the latter. For instance, **Bio-1b** states that prior to performing construction work, the site shall be reviewed by a botanist or knowledgeable landscape architect to "perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence....".

In comparison, **Bio-1c** states that: Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented. A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for *Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000) and CDFW *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG, 2000, see EBCNPS "3a. General Comments – Update Botanical Survey Protocol"). The Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results and consultation with CDFW."

Bio-1c goes onto list seven additional measures to avoid, minimize, or compensate for impacts to special-status plant species, as well as any sensitive plant communities that are revealed in the pre-construction surveys. Also, Bio 1-c draws upon the HMMP cited in Mitigation Measure Bio-1b.

In lieu of a clear explanation of how and when these two mitigation measures apply when implementing the LUPA, **Bio-1c** is the more comprehensive mitigation measure that should be adopted for pre-construction botanical surveys overall, as well as for measures to avoid, minimize, or compensate for impacts for special status plants, and sensitive plant communities that are revealed in the pre-construction surveys. Also, EB CNPS requests the opportunity to review and comment on the HMMP prior to adoption.

- c. The minimum mitigation ratio for special status plants should be improved from 1:1 to at least 3:1 (DEIR page 111) Setting 1:1 as a minimum replacement ratio is insufficient, given the status/rarity of the species and attrition rates due to any number of environmental factors.
- d. Allowing "invasive species cover [to] be less than or equal to the invasive species cover in the impact area" at the end of the mitigation seems counter-productive to the goal of reestablishing special status plants. A higher standard of invasive species control is needed when establishing the Habitat Mitigation and Monitoring Plan and/or the Vegetation and Invasive Species Management Plan. For instance, the goal should be to

CNPS-12 (Cont.)

CNPS-13

at least eradicate aggressive, highly-competitive invasive weeds that threaten the existence of special status plants in the the mitigation sites, and include weed management for aggressive, highly-invasive weeds in the long-term restoration sites in the park.

CNPS-14 (Cont.)

Plant protection measures need to be extended to maintenance and restoration activities and EBRPD's contractors. We recommend that the language in mitigation measure BIO-1c Mitigation Measure BIO-1c "Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species" be revised to state these mitigation measures would also apply to restoration and long term management/maintenance of the park by the District and third-party contractors. We recommend that the text of MM BIO-1c read: "The Park District, its Construction Contractors, and restoration and maintenance personnel will implement measures to avoid..." (DEIR, pg. 110).

3) General Comments

- a. Update Botanical Survey Protocol. The DEIR may have been developed before the current (2018) CDFW botanical survey protocols were released, but please update these from: *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*, State of California, Department of Fish and Game, December 9, 1983, **Revised May 8, 2000** (DEIR, pg. 110) to: Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, CA Dept. of Fish and Wildlife, March 2018. Also, CNPS protocols (CNPS Botanical Survey Guidelines, CNPS, June 2001).
- b. Correct for inconsistency of project area labeling: References to different portions of the park expansion should be consistent or cross-referenced throughout the document. For instance:
 - There are references to the plant surveys conducted in the Patterson Ranch Development Project EIR, which is implied to mean the Patterson Slough Natural Unit. Clarification is needed if the Patterson Ranch Development Project EIR encompasses a larger area than what is described as the Patterson Slough Natural Unit.
 - Many portions of the EIR reference the area south of the Ardenwood Creek (Line P) area, which is inferred to be the Southern Wetlands Natural Unit. For example, page 100 states, "A Rare Plant Survey was conducted.... [in] the area south of Ardenwood Creek within the Park Expansion Area."
 - Where inconsistent location labels are used, we recommend cross-referencing these various labels with location labels selected for Figure 3-2 of the EIR: Patterson Slough Natural Unit, Ranch Road Recreation Unit, Historic Patterson Ranch Farm and

Farm Yard Agricultural Unit, Western Wetlands Natural Unit, Southern Wetlands Natural Unit.

CNPS-17 (Cont.)

In conclusion, EB CNPs heartily supports the goals and plans in the Coyote Hills LUPA to restore native plant communities and provide a variety of environmental education and recreation opportunities. The EBRPD Master Plan, Board, and staff recognize the importance of protecting native plant communities and the animals that depend upon them—especially during a time of unprecedented urbanization. We look forward to your serious consideration of these comments, both in the Final EIR and as the District continues planning this project over the long term, to conserve through rigorous survey methodology and native plant preservation the special status native plants and sensitive plant communities that are rare, unusual, or significant to Coyote Hills park.

CNPS-18

Sincerely,

im Hanson

Jim Hanson Conservation Committee Chair

Cc: Ivy Poisson, Conservation Committee Tri Do, Conservation Committee

Attachment: Table 1. Summary of Surveys Conducted for Rare Plants on Park Expansion Area

Report Title, Date, and Author	Project Area	Results	Comments/Questions
<u>Report</u> : Various <u>Date</u> : From 1990 to 2013 <u>Author</u> : HT Harvey, WRA, Circle Point, WRA, misc. others	Varies. Seems like some reports reference areas outside of the Project Area (existing Coyote Hills RP), some are just for Patterson Ranch (Patterson Slough NU), and some along Ardenwood Creek.	No rare plants were observed from previous surveys	 See documents reviewed on page 102. There is mention of these documents being reviewed, but there is no mention of the results of these reports as they pertain to rare plants on the site. There needs to be a summary of the findings of the reports, especially as they pertain to rare plant surveys/observations.
<u>Report</u> : Patterson Ranch Development Project EIR <u>Date</u> : 2010 and 2013 <u>Author</u> : Circle Point	Patterson Ranch Development Project EIR, or Patterson Slough Natural Unit?, possibly all areas north of Ardenwood Creek	No rare plants were observed " but a thorough botanical survey was not completed" page 100	 Need clarification on which surveys are being referenced – is it bullet points 6 & 7 on page 102? When did this/these survey(s) within these reports take place? Are the results of this plant survey still valid? There is too little detail about these surveys and it sounds like the methodology was not robust enough – see quote under "results" column
<u>Report</u> : Rare Plant Survey <u>Date</u> : June 27, 2016 <u>Author</u> : Jane Valerius	"South of Ardenwood Creek within the Park Expansion Area" page 100, what we assumed to be the Southern Wetlands Natural Unit	Found 3 special status plants in the saline wetland area: Congdon's tarplant, lesser saltscale, and San Joaquin spearscale	 We would like to see report from the rare plant survey appended to the DEIR. On page 101 of the DEIR, 4 other plants were considered to have potential to occur in this area, although they were not observed. This includes Hoover's button celery (Eryngium aristulatum var. hooveri), Alkali milk-vetch (Astragalus tener var. tener), Prostrate navarretia (Navarretia prostrata), Saline clover (Trifolium hydrophilum)
<u>Report</u> : Rare Plant Survey <u>Date</u> : September 1, 2016 <u>Author</u> : Jane Valerius	Southern Wetlands Natural Unit (SWNU)	No information	 This was the same survey area as the June 27, 2016 surveys. Need results from this survey.
<u>Report</u> : Wetland Delineation <u>Date</u> : April 11, 2017 <u>Author</u> : Jane Valerius	"Remain(der) of the project area," or outside of the SWNU	No information	Reference found on page 103

Table 1. Summary of Surveys or Reports Conducted for Rare Plants on Park Expansion Area

Report Title, Date, and Author	Project Area	Results	Comments/Questions
Report: Wetland Delineation	"Remain(der) of the project	No information	 Reference found on page 103
<u>Date</u> : May 2, 2017	area," or outside of the		
Author: Jane Valerius	SWNU		
Report: Coyote Hills Restoration	The Entire Project Area?	Summarized	Reference found on page 65
and Public Access Project –		throughout DEIR,	
Existing Conditions and		according to	
Opportunities and Constraints		statement on pg.	
Report		65	
Date: September 2018			
Author: Questa Engineering			
Corp. (Dr. Sam McGinnis and			
Jane Valerius)			

Response to Comments CNPS-1 through CNPS-18

Response CNPS-1

This comment provide general background information and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response CNPS-2

The commenter generally states that the DEIR does not provide adequate baseline information regarding botanical resources on the project site. The Draft EIR section on existing biological resources (see section 4.1 Biological Resources, pages 65-129) is based on a review of prior biological investigations completed for the proposed Patterson Ranch Development Project EIR, biological studies completed in the adjacent Coyote Hills Regional Park, investigations completed for the Alameda County Flood Control and Water Conservation District for the Ardenwood Creek/Line P Flood Control and Restoration Project, a review of literature including the California Natural Diversity Data Base (CNDDB) and field investigations of plant communities, wildlife habitat, wetlands and rare plants completed as part of development of the LUPA and Park Development Plan, and this CEQA document.

The description of the existing setting is comprehensive and provides an adequate amount of information for analysis of potential Project impacts on these resources and to determine and prescribe appropriate mitigation measures. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

Response CNPS-3

The results of the previous biological surveys, including the report authors, report date, and findings (conclusions on presence/absence etc.) were presented in summary form and referenced in Table 4.1-1, Special Status Wildlife Species (Draft EIR, page 80-89). CEQA does not require an exhaustive presentation of previous studies. In addition, since the analysis concluded that rare plants are not likely to occur north of Ardenwood Creek because of the long disturbance history and ruderal nature of this area, and compensatory mitigation measures are provided in the un-likely event that rare plants are discovered during Mitigation Measure required pre-construction rare plant surveys-this approach is sufficient for purposes of determining biological impacts and development of mitigation measures The complete reports will now be included as Appendix E of the DEIR.

Page ii of the DEIR, Table of Contents, is revised as follows:

Appendix A: Initial Study Appendix B: Notice of Preparation (NOP) and Comments on NOP Appendix C: Traffic Impact Report Appendix D: EBRPD Guidelines for Protecting Parkland Archaeological Sites <u>Appendix E: Special Status Species Studies</u>

The second paragraph on page 90 of the DEIR is edited as follows:

A number of Special Status Species surveys were conducted during the planning and environmental review work completed for the Patterson Ranch Planned District project as well as monitoring and observation conducted by the Project Biologist during the Phase I Ardenwood Creek Flood Control and Restoration Project. Previous biological surveys (Appendix E) included:

The following Appendix E	cover sheet and subsequen	t reports are added at the	e end of the DEIR:

Appendix E

Special Status Species Studies:

- <u>California Red-Legged Frog (CRLF) surveys of Patterson Slough and Line P by Pacific Biology (Sept. 2007) and H.T. Harvey (Aug. 2001).</u>
- California Tiger Salamander (CTS) by and H.T. Harvey (Aug. 2003) and Condor Country Consulting (2003).
- Vernal Pool Fairy Shrimp (VPFS) by Condor Country Consulting (Nov. 2003) and Helm Biological Consulting (Feb. 20014).
- Burrowing owl (BO) by Pacific Biology (July 2007) and H.T. Harvey (Aug. 2001).
- Hawks and other Birds of Prey observed by H.T. Harvey 2001, 2002, 2003).
- Jane Valerius Environmental Consulting Ardenwood Plant Survey Letter (July 28, 2016)

Response CNPS-4

The term "a thorough botanical survey was not completed" requires further explanation. To clarify, observations for rare plants were made during the field work for plant community mapping and descriptions and for the preliminary wetlands determination. The initial field work by the Project Botanist/Wetlands Scientist indicated very low potential for rare plants to occur in the ruderal or weedy grassland areas north of Ardenwood Creek, indicating that comprehensive floristic surveys were not warranted. The Project areas have had over 100 years of disturbance history. A field study of the potential jurisdictional wetland areas was completed. No rare plants were observed either in the ruderal areas or the wetlands during field work completed in April and May of 2018, within the floristic window for many grasses and forbs. The field work focused on areas where project construction activities and proposed improvements could impact wetlands, sensitive plant communities, and rare plant populations (e.g. parking area, trails, wildlife observation platforms, picnic facilities as indicated in DEIR Figures 3-3A and 3-3B). Areas where no improvements would take place, including areas designated for agricultural and oak tree planting, were traversed less intensely.

Because of the occurrence of saline-alkali soils in the area south of Ardenwood Creek, a rare plant survey was completed by botanist Jane Valerius in summer of 2016, generally following CDFW botanical survey protocol. This survey found three saline-alkali soil associated rare plants in 4 small locations in the area south of Ardenwood Creek. The rare plants included Congdon's tar plant, San Joaquin spearscale, and Lesser saltscale. See also Response SC-11.

Consulting Botanist Brad Olson has also been conducting field work within the Project area over the last one-and-one-half years associated with developing a restoration plan for this area. His field work has been conducted over the spring, summer, fall, and winter months, and has included observations on soil and wetland conditions, plant community and invasive species observations, of wetlands and ruderal lands, and analysis of Patterson Slough. Mr. Olson also has not observed any Special Status plants within the Project area, and agrees that there is a very low potential for Special Status native plant species to occur north of Ardenwood Creek. (Personal communication, May 7, 2019 field visit with J. Peters, Questa). The analysis in the Draft EIR is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

See also response SC-11.

Response CNPS-5

The commenter requests information regarding whether the native grasses, as well as any native forbs, were surveyed for meeting the criteria of a sensitive plant community. The commenter also requests a list of the native grass species on the site.

In response to this comment, the following paragraph is added after the second paragraph of the Ruderal Grassland (Rg) discussion on page 74 of the Draft EIR:

No native grassland plant communities were observed during the biological field work other than saltgrass in the former agriculture drainage ditch in the Southern Wetlands Natural Unit and patches of purple needle grass (*Nassella pulchra*) also located within the Southern Wetlands Natural Unit just southwest of the agricultural drainage ditch. Very widely scattered small patches of California Brome (*Bromus carinatus*), <u>meadow barley (*Hordeum brachyantherum*), creeping wild rye (*Elymus triticoides*), and blue giant wild rye (*Elemus glaucuss*) were also observed. In the wetland areas, the grass-like plants included tall flat sedge (*Cyperus eragrostic*), alkali bulrush (*Boboschoenus robustus*), Baltic rush (*Juncus balticus*), and toad rush (*Juncus bufonius*).</u>

These native plants occupy less than 10% to 20% of wetland area plant cover within the Project area and are insufficient in cover density to define areas containing individuals with these species as a sensitive plant community.

See also response CNPS-9.

Response CNPS-6

See Response CNPS-5. The remnant oak woodland is unique in that it is the only such oak habitat occurring in the Park Expansion area and provides information on the density and spacing of mature oaks as well as an acorn source for tree propagation.

As noted in CNPS-5, there are no other areas within the Project area that meet the criteria for a rare plant community alliance.

See also response CNPS-9.

Response CNPS-7

CEQA does not require the conducting of protocol level rare plant surveys. The March 20, 2018 CDFW "Protocols for Surveying and Evaluation Impacts to Special Status Native Plant Species and Natural Communities" (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline) ") referred to by the commenter is a guidance document, not a regulatory rule or requirement. Based on the District's fieldwork, no environmental resources (soil or hydrology) that are unique to the region would be affected except as noted below, so protocol level rare plant surveys were not warranted on most of the Project site. The guidance document states that it is appropriate to conduct a botanical field survey when:

- Natural vegetation occurs on site and it is unknown if special status plant species or natural communities occur on the site, and the project has the potential for direct or indirect effects on vegetation
- Special status plants or natural communities have historically been identified on the project site; or
- Special status plants or natural communities occur on sites with similar physical and biological properties as the project site.

Based on the completed field work, none of the above three conditions were identified.

The CDFW 2018 guidance document on page 4, under "Botanical Surveys," recommends "botanical surveys prior to commencement of any actions that may modify vegetation." This recommendation indicates that pre-construction surveys are appropriate for areas that do not meet the above criteria.

Accordingly, the District conducted rare plant surveys in the unique sensitive saline-alkali soils and depressional features that occur in the Southern Wetlands Natural Unit. Three rare plant species were found to occur as described in section 4.1 Biological Resources of the EIR. See also response CNPS-8 and SC-11.

Response CNPS-8

Based on soil and hydrologic conditions and the completed field work, none of the special status plants reported in the vicinity are likely to occur within the LUPA park expansion area or within the expected limits of work/disturbance for proposed improvements to Patterson Ranch Road and the Tuibun Trail to the west.

There is very low potential for these plants to occur immediately adjacent to Patterson Ranch Road and Tuibun Trail, where road and trail elevation and widening and utility upgrades and extensions are proposed. The work would occur within the roadbed and paved trail sections or adjacent shoulder area and embankment fill slopes. These adjacent ruderal areas are regularly mowed to facilitate safe public access.

Response CNPS-9

In response to this comment, the following additional information is provided on sensitive natural communities/plant communities.

A Sensitive Natural Community is a plant community recognized by CDFW in its California Natural Diversity Database (CNDDB). The CDFW Wildlife and Habitat Data Analysis Branch of developed a *List of California Terrestrial Natural Communities*, available online (https://www.wildlife.ca.gov/data/vegcamp/natural-

communities#natural%20communities%20lists). The purpose is to assist in the characterization and assessment of the relative rarity of various plant communities. Based on this list and the plant community and wetlands mapping that was completed, the mixed willow riparian forest along Patterson Slough should be considered a Sensitive Natural Community, as discussed on pages 78, and 118-119 of the Draft EIR.

Other potential Sensitive Natural Communities evaluated for this classification include the saltgrass plant community associated with this linear/trapezoidal agricultural drainage ditch in the Southern Wetlands Natural Unit as a "saltgrass flats." However, this agricultural drainage ditch is not a natural land form, but a significantly man altered and disturbed area and this area historically was unlikely to have been dominated by salt grass. It is therefore not a sensitive natural community.

The saline seasonal wetlands occur to the west of the Park Expansion Area near Patterson Ranch Road and Tuibun Trail, where improvements are proposed. These wetland areas were evaluated as potential "pickleweed mats," but these areas, which consist of diked baylands and former pickleweed saltmarsh, is no longer connected to Bay water tidal flooding. Proposed improvements to the Tuibun Trail would avoid disturbing areas dominated by pickleweed.

Scattered individuals of tarplant (*Centromadia parryi* ssp. *Congdonii*, Congdon's tarplant) occur in the Southern Wetlands Natural Unit, but these plants are too small and sparsely populated by tarweed plants to be considered a Sensitive Natural Community. Scattered clumps of purple needlegrass (*Nassella pulchra*) also occur within the Southern Wetlands Natural Unit. Needlegrass is not currently a dominant member of the plant community, but appears to be increasing in percentage over the last several years possibly associated with favorable rainfall conditions. Because of their scattered and patchy occurrence, with a composition of less than 10% of the total plant cover, the occurrence of purple needlegrass in this area and within the ruderal grasslands, along with scattered patches of creeping wild ryegrass and California brome, also do not constitute a native grassland Sensitive Natural Community.

None of the above additional information changes the Draft EIR conclusions regarding potential impacts to rare plants or Sensitive Natural Communities, or results in necessary changes to mitigation measures not already addressed in other comment responses. The analysis in the Draft EIR is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and additional analysis is not required.

See also response CNPS-5.

Response CNPS-10

As discussed in responses CNPS-5 through CNPS-8, above, appropriate surveys have been conducted and the results of the field surveys resulted in the finding that because of the long and continuing disturbance history and the ruderal nature of the plant communities in areas that will be impacted by Project actions and activities, there is a very low potential for rare (listed) plants to occur north of Ardenwood Creek, (in the Western Wetlands and Patterson Slough Natural Units) and a low potential for sensitive natural plant communities to be adversely impacted. Based on this analysis, the recommended Mitigation Measures adequately reduce potential impacts to rare plants to less than significant, and the activities recommended by the commenter are not required or necessary.

The analysis on page 110 in the Draft EIR is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and additional analysis is not required.

Response CNPS-11

The proposed Mitigation Measure for pre-construction botanical surveys for rare plants does not represent deferred analysis. As discussed in response CNPS-1 and 4 above, the DEIR analysis relied on review of CNDDB databases, previous studies and targeted or focused field surveys to support that conclusion that there is a low potential for rare plants to occur north of Ardenwood Creek, and therefore potentially significant impacts are unlikely to occur. Mitigation Measure BIO-1c provides additional assurance that if any rare plants are unexpectedly found, they would be protected through modification of the development plans prior to construction. The trail plans have enough design flexibility to accommodate changes in alignment if necessary. Mitigation Measure BIO-1c also includes a provision for compensatory mitigation in the unlikely event that the project impacts rare plants.

Mitigation Measures BIO-1c employs common regulatory agency accepted standards that are most often prescribed. These mitigation measures are also used for projects where comprehensive botanical surveys have been completed within areas of known rare plant populations. The HMMP will include a contingency requiring the Park District and Flood Control District to successfully demonstrate success with restoration of the impacted rare plants on an un-disturbed part of the Project area with similar saline alkali soils prior to disturbance of the site, for those areas where avoidance is not possible.

The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Mitigation measures identified in the Draft EIR would reduce all impacts of the Project on biological resources to a less-than-significant level. Additional analysis is not required.

Response CNPS-12

We agree that BIO-1c is the applicable Mitigation Measure for botanical/rare plant surveys. In any case, the Park District would be required to implement all mitigation measures in the Draft EIR, including BIO-1b and BIO-1c, if the project is implemented.

In response to this comment, to clarify the relationship between Mitigation Measure BIO-1b and BIO-1c, the second bullet of Mitigation Measure BIO-1b, on page 109 of the Draft EIR, is edited as follows:

• To facilitate preparation of the Plan, the Park District shall, prior to construction, have a <u>qualified</u> botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species, and comply with botanical survey requirements of Mitigation Measure BIO-1c.

The latest CDFW reference for conducting pre-construction botanical surveys will be used. This does not change any Draft EIR conclusions with respect to biological impacts or needed mitigation measures, identify a new significant impact, or result in an increase in severity of a previously-identified impact. Therefore, recirculation of the Draft EIR is not required.

The commenter also requested the opportunity to review the Habitat Mitigation and Monitoring Plan ("HMMP"). The HMMP will be a public document, once filed with CDFW, and/or the US Army Corps of Engineers.

Response CNPS-13

In response to this comment, the eighth bullet point of Mitigation Measure BIO-1c, on pages 17 and 111 of the Draft EIR, is edited as follows:

• If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 3:1 ratio based on the area of lost habitat (accurately field measured) or as determined by the Qualified Biologist and Park District biologists in consultation with CDFW, which has review and approval authority over a Rare Plant Mitigation Plan/Habitat Mitigation and Monitoring Plan. Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas.

See also Response SC-20.

Revised Mitigation Measure BIO-1c as described above clarifies and is equal to or more effective than the Mitigation Measure BIO-1c in the Draft EIR. No significant new impacts, or substantial increase in the severity of an impact identified in the Draft EIR, are identified by the text changes above. Therefore, recirculation of the Draft EIR is not required.

Response CNPS-14

CDFW will be consulted on the allowable invasive species cover and the other comment recommendations for management of aggressive and highly invasive weeds as part of their review and approval of any needed HMMP. Park District staff and consultants will also review this recommendation in developing the Restoration/Implementation Plan. In any case, mitigation measures identified in 4.1 Biological Resources, pages 65-129 of the Draft EIR, would reduce all impacts of the Project on biological resources to a less-than-significant level.

Response CNPS-15

The commenter recommends clarification language to Mitigation Measure BIO-1c.

In response to this comment, the first paragraph of Mitigation Measure BIO-1c, on pages 17 and 110 of the Draft EIR, is revised as follows:

Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species: The Park District, <u>and</u>-its Construction Contractors, <u>and restoration and maintenance personnel</u> will implement measures to avoid and minimize potential adverse effects on Special Status plants, <u>with a special focus on the Southern Wetlands Natural Unit</u>. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.

This revision is a minor clarification and does not change the Draft EIR conclusions. With the changes above, the revised Mitigation Measure BIO-1c is equal to or more effective than version of Mitigation Measure BIO-1c in the Draft EIR. No significant new impacts, or substantial increase in the severity of an impact identified in the Draft EIR, are identified by the text changes above. Therefore, recirculation of the Draft EIR is not required.

Response CNPS-16

Comment noted. The Park District will consider this input prior to taking action on the EIR and LUPA. The proposed preconstruction botanical surveys will use the CDFW botanical survey guidelines as described in response CNPS-7.

Response CNPS-17

Thank you for your comment on the need for consistency in Project (geographic area) labeling. We have made some select changes to the LUPA and EIR to reflect this comment, as well as greater consistency in this in Response to comments on the DEIR. The following provides clarification on the geographic and place-name terms used:

Patterson Ranch Development EIR. This was the document on the proposed residential and commercial development that covered nearly the entire Project area, as well as areas to the north and northeast outside of the Project area, that were approved for development by the City of Fremont. It included all of the Patterson Slough Natural Unit, whose boundary is approximated by Patterson Ranch Road on the south, and Crandall Creek on the north, and Paseo Padre Parkway on the east.

South of Ardenwood Creek/Line P. This area includes most but not all of the Southern Wetlands Natural Unit. This Unit also includes a small area on the north side of the creek where a channel bypass and wetlands area were created as a part of the Alameda County Flood Control and Water Conservation District Line P Flood Improvement and Restoration Project.

The Ranch Road Recreation Unit, the Patterson Ranch Historic Agricultural Unit, and the Western Wetlands Natural Units all lay between the Patterson Slough and Western Wetlands Natural Units.

This comment does not reflect on the adequacy of the CEQA analysis or findings.

Response CNPS-18

For responses to individual comments, please see Responses CNPS-1 through CNPS-17, above.

Golden Gate Audubon Society



inspiring people to protect Bay Area birds since 1917

April 22, 2019

Karla Cuero East Bay Regional Park District Acquisition Stewardship and Development Division 2950 Peralta Oaks Court PO Box 5381 Oakland, CA 94605 kcuero@ebparks.org

re: Draft Environmental Impact Report and draft Land Use Plan Amendment Coyote Hills Restoration and Public Access Project

Dear Ms. Cuero,

On behalf of the Golden Gate Audubon Society (GGAS), please accept comments on the **draft Environmental Impact Report (dEIR) and draft Land Use Plan Amendment (dLUPA) Coyote Hills Restoration and Public Access Project**

GGAS is a 102 year old non-profit organization with over 7,000 members who are dedicated to protecting native bird populations and their habitats. GGAS supports the general Project objectives to lessen significant environmental impacts by applying mitigation measures as described in the draft EIR. "Mitigation of significant impacts must substantially lessen or entirely eliminate the physical impact that the project action will have on the biological resource. CEQA requires that all feasible mitigation be undertaken, even if it does not fully reduce impacts to a *less than significant* level of impact."¹ However, the mitigation measures are inadequate because they fail to demonstrably assure the reduction of significant impacts on sensitive habitats or special-status species to less than significant effects.

This comment addresses the adequacy and completeness of the dEIR to evaluate and mitigate for impacts to federal and state protected special-status and native bird species from the dLUPA that will develop public access and up to 5 miles of trails while "preserving and restoring more than 230 acres of habitat." p1 dLUPA

INCREASE RESTORATION, PROTECTION, AND PRESERVATION OF SENSITIVE HABITAT FROM 130 ACRES OF 306-ACRE PROJECT AREA TO 230 ACRES AS REFERENCED IN THE DRAFT LUPA

The draft EIR and dLUPA for the 306-acre Coyote Hills Restoration and Public Access Project area includes "sensitive resource areas within all the units, such as special-status species occurrences." p2 dEIR. Biological surveys verify the presence of at least 40 special-status species that occur through out the Project area. p.90 dEIR However, of the 306 acres of this Project area, only 130 acres are scheduled for habitat restoration and enhancement. p42 dEIR

¹ p104. dEIR

GOLDEN GATE AUDUBON SOCIETY

GGAS-1

The remaining 276 acres are scheduled for facility upgrades, new trails, recreational amenities, and associated maintenance installations. This means that less than 1/2 of the new Project area will be reasonably protected for over 40 special-status species that may lose over 1/2 of their habitat to impacts from recreation activities.

By the dEIR's own disclosure, this Project may have potentially significant impacts to specialstatus and other native bird species and to their sensitive habitats.p104 dEIR Such impacts could be avoided by expanding protection of sensitive high habitat value areas and restricting recreation to low habitat value areas. Moreover, the dEIR plan to restore and enhance 130 acres of habitat contrasts with the dLUPA plan to preserve and restore more than 230 acres of habitat as stated in the dLUPA p1. It is unclear whether this discrepancy reflects the dLUPA plan to count the 80 acres for flood control and wetland mitigation toward the 130-acre restoration plan.

Habitat restoration and enhancement will take place on 130 of the 306-acre Project area. p42 dEIR This is approximately 36% of the Project area and the remaining 67% includes 80 acres for flood control and wetlands mitigation for local flood channel maintenance activities and recreational enhancements. It is unclear whether the flood control and wetlands mitigation plan will restore and protect historic ecological features or will constitute potentially significant environmental impacts. Public access and recreation should not compromise the goals for mitigating environmental impacts and for restoring and protecting sensitive habitat for special status species.

Under CEQA, the EIR must explain how significant impacts will be avoided or minimized to less than significant. p5 dEIR referencing Section 15151 of the State CEQA Guidelines. If wetland mitigation and flood control constitute significant environmental impacts, then this plan too heavily favors public access and recreation and should be more balanced with habitat restoration and protection for the more than 40 special-status species that surveys reported to occur in the Project area. On the other hand, if the 80-acre flood control and wetland mitigation plan is implemented in a manner that meets criteria for habitat restoration and enhancement and reduces environmental impacts so that they are less than significant, then the dLUPA's plan to preserve and restore approximately 230 acres more favorably balances habitat restoration with public access and recreation.

UNDERTAKE A YEAR-LONG BIOLOGICAL SURVEY THAT ESTABLISHES BASELINE ENVIRONMENTAL INITIAL CONDITIONS, INCLUDING HIGH VALUE HABITATS THAT ARE OCCUPIED OR ARE POTENTIALLY OCCUPIED BY SPECIAL STATUS SPECIES

The dEIR references several biological surveys but the scope and detail of such surveys appear to be seasonal or occasional.² The dEIR states, "The baseline for determining the significance of potential impacts under CEQA, for the purposes of this Draft EIR, is the existing condition of the Project area."³ However, the dEIR fails to describe a comprehensive continuous field evaluation of the existing environmental conditions that should constitute the baseline for measuring impacts. Table 4.1-1 on p80ff of the dEIR describes the potential for occupancy by special-status species in the Project area and narratives describe the habits of special-status species in the Project area, but there are incomplete reports of occurrence, frequency, or occupancy during a

GGAS-2 (Cont.)

² p 90 dEIR, "A number of Special Status Species surveys were conducted ... for the Patterson Ranch Planned District project as well as monitoring and observation conducted by the Project Biologist during the Phase I Ardenwood Creek Flood Control." and Restoration Project

³ p101 dEIR. Standards of Significance

year-long protocol survey.⁴ The dEIR should describe a detailed year-long biological survey and evaluation of the baseline environmental condition of the project area including the high value habitats that are occupied by special-status species.

Under CEQA, an EIR must sufficiently explain how significant impacts will be avoided or minimized to less than significant in a manner that is adequate, reasonably complete, and that demonstrates a good faith effort at full disclosure. p5 dEIR referencing Section 15151 of the State *CEQA Guidelines*. A complete description and implementation of a year-long biological survey for the purpose of providing baseline environmental conditions in the project area would constitute a good faith effort of full disclosure of existing conditions on which impacts may be evaluated.

Implementation of the Project is scheduled to take place over a period of three to five years. p84 dLUPA. This implementation period allows time undertake a careful detailed monitoring program that measures environment impacts and enacts adaptive management measures when impacts exceed thresholds. For example, when special-status species are nesting, trails may be temporarily closed and related recreational activities or public access may be temporarily restricted.

PROTECT SENSITIVE HABITAT FROM SIGNIFICANT IMPACTS BY RELOCATING EXISTING TRAILS AND RESTRICTING NEW TRAILS TO LOW HABITAT VALUE AREAS

The dLUPA and dEIR fail to adequately protect sensitive habitat from existing and planned new trails. The dEIR states on p73, "Visitor use of the existing trail systems in the Project area and throughout the Park bring human presence into close proximity to sensitive wildlife habitats, including the Patterson Slough riparian corridor..[and] includes the existing Crandall Creek Trail located to the north of Patterson Slough and paralleling Alameda Creek, the Tuibun Trail, which parallels Patterson Ranch Road on its north side and runs from Paseo Padre Parkway to the Visitor Center, and the Willow Trail, that provides a connection between Crandall Creek Trail and the Tuibun Trail via a foot path that crosses Patterson Slough near its top or north end." However, there are no plans in either the dLUPA or the dEIR to relocate existing trail systems. Instead, the plan will add up to 5 miles of trails. p1 dLUPA This proposal to allow existing trails to remain near sensitive habitat and add up to 5 miles of additional trails fails to adequately reduce impacts from recreation to less than significant.

However, over 240 acres of the 306-acre project area are habitat for over 40 Special-Status species some of which not only occupy but also breed and nest in the Project area.⁵ See Appendix A of this comment for a list of special status bird species in the Project area.⁶ Therefore, GGAS opposes the addition of new trails, dog walking, and mountain biking activities to areas with high value habitat that are occupied or have the potential to be occupied by special status species.

GGAS-3 (Cont.)

⁴ p83 "This section contains information from the *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report* ... as well as information provided in the *Patterson Ranch Planned District Final EIR*, and other published and unpublished sources. Preparation of this report included a records search, field mapping, and a focused field review of potential biological impacts."

⁵ p90 dEIR. "There are ... 40 Special Status wildlife species that have a moderate or high potential to occur within or in close proximity to the Project area. Twenty of these Special Status wildlife species are either State/Federally threatened/endangered or are of significant prominence within the Project area."

⁶ See Appendix A of this comment.

DESIGNATE HIGH VALUE HABITAT AS SPECIAL PROTECTION AREAS THAT ENCOMPASS SENSITIVE HABITATS FOR SPECIAL STATUS SPECIES THAT OCCUR OR HAVE THE POTENTIAL TO OCCUR IN THE PROJECT AREA

The District can apply the designation of Special Protection Areas to high value and sensitive habitats as a means to reduce environmental impacts from this Project to less than significant. Table 4.1-1 on p84ff of the dEIR describes the potential for occupancy by special-status species in the Project area and narratives describe the habits of special-status species in the Project area.⁷ Special Protection Area designations are presently planned for willow sausal, mixed riparian forests and seasonal wetlands.⁸ However, Table 4.1-1 describes the potential for many special status species to occupy habitats that occur outside the designated special protection areas. With the application of a year-long baseline environmental condition survey, qualified biologists can identify high value habitats that have high to moderate potential for occupancy by special status species and supplement the information in the dEIR. These habitats should be designated as Special Protection Areas as a means for reducing environmental impacts from this Project to less than significant.

AVOID ALLOWING DOGS NEAR KNOWN SENSITIVE HABITAT THAT ARE OCCUPIED OR ARE KNOWN TO BE OCCUPIED BY SPECIAL-STATUS SPECIES

The plan to allow dogs off leash in some areas may cause significant impacts to sensitive habitats and special-status species. GGAS incorporates by reference the comments from the Regional Parks Association.⁹ While allowing only leashed dogs is less impactful than allowing dogs off-leash, the District lacks sufficient enforcement resources to actively patrol and enforce leash requirements. It is reasonable to assume that most dogs would be off-leash because of lack of enforcement. The District acknowledges receiving reports of such scofflaw activity through out the regional park system.¹⁰ The Bayland Ecosystem Habitat Goals Report in the dLUPA states: "pets can diminish the value of T-zones [transition zones] for wildlife (Simes 1999, Andrusiak 2003, Forrest and St. Claire 2006)."¹¹ The plan should restrict dogs to developed areas and to areas of low value habitat and require that all dogs in the Project area remain leashed.

GGAS-6

⁷ p80ff dEir

⁸ p111 dLUPA. "Special Protection Areas are designated by the Board in Ordinance 38... to preserve and protect ... natural resources. The proposed willow sausal and mixed riparian forest and seasonal wetlands restoration areas adjacent to Patterson Slough in the Patterson Slough Natural Unit would be designated as a Special Protection Area. Public access would be precluded from this area by use of signage and/or fencing, or dense native landscape plantings."

⁹ Regional Parks Association comment submitted August, 2018: "Ordinance 38 provides for dog exclusions by area based on verifiable resource reasons, and not by trail .."

¹⁰ Pers. comm.

¹¹ p10. Baylands Ecosystem Habitat Goals Science Update (2015) Science Foundation Chapter 4 Connections to the Watersheds: The Estuarine-Terrestrial Transition Zone Found at: <u>https://baylandsgoals.org/wp-content/uploads/2015/10/BEHGU_SFC4.pdf</u>

CEQA REQUIRES THAT CUMULATIVE IMPACTS THAT RESULT IN SIGNIFICANT EFFECTS MUST BE AVOIDED

The Patterson Slough supports a diverse population of over 20 special-status species that the proposed new trails and dog activity would negatively impact.¹² Under CEQA, cumulative impacts must be avoided to the extent feasible.¹³ Such recreational impacts would likely be cumulative and ultimately be significant. Some studies suggest that high-intensity recreation, such as mountain biking and dog walking, have potentially adverse impacts to wildlife and their habitats.¹⁴ High-intensity recreation should be excluded from Patterson Slough and the creek areas as a means of mitigating Project-related environmental impacts to less than significant.

PROTECT WILDLIFE CORRIDORS AND PRESERVE AND ENHANCE HABITAT PATCH CONNECTION TO EDEN LANDING AND DON EDWARDS NATIONAL WILDLIFE REFUGE

The Coyote Hills Project area is part of an extensive ecosystem that connects to Eden Landing Ecological Reserve and Don Edwards National Wildlife Refuge.¹⁵ The dLUPA on page 33 states: The Plan Area is located within the area comprising Segment R in the South Bay Region that is addressed in the **Baylands Ecosystem Habitat Goals Report** of 1999 as updated in 2016 (Goals Report)." The Goals Report emphasizes the value of connecting habitat patches and wildlife corridors and states: "Habitat quantity, quality, and connectivity are all fundamental drivers with respect to the long-term population trends, abundance, and resilience of every plant and animal species."¹⁶ The plan should protect wildlife corridors and enhance habitat patch connection as mitigates significant impacts to less than significant.

"One of the most significant characteristics of mountain biking as a form of wildlife disturbance is a result of the potential relative speed and silence of the activity. A relatively fast moving, quiet mountain biker may approach an animal without being detected until well within the normal flight response zone."

Birds at a Southern California beach: seasonality, habitat use and disturbance by human activity, Lafferty, K.D., Biodiversity and Conservation 10: 1949–1962, 2001. "[B]eing chased conditions birds to be wary of dogs or because birds instinctively view dogs as predators (Gabrielsen and Smith 1995)." found at: http://homes.msi.ucsb.edu/~lafferty/Publications/Snowy%20Plovers_files/Laff.01.BioDivCons.pdf

¹⁵ p12 dLUPA. "Addition of these lands to Coyote Hills Regional Park will increase ... opportunities for ... habitat restoration ... to add increasing ecological complexity and diversity to the wetland habitats provided at the nearby U.S. Fish and Wildlife Service Don Edwards Wildlife Refuge and the California Department of Fish and Wildlife managed Eden Landing Ecological Reserve..."

¹⁶ p6. Risks from Future Change for Wildlife Chapt5, in Baylands Ecosystem Habitat Goals Science Update (2015)

Found at: https://baylandsgoals.org/wp-content/uploads/2015/10/BEHGU_SFC5.pdf

GGAS-7

¹² p78 dEIR "Patterson Slough is the most important biological feature within the Project area and is characterized by a mixed willow-dominated riparian forest [and] host numerous species of migratory birds including Nuttall's woodpecker (*Picoides nuttallii*), and white tailed kite (*Elanus leucurus*)."

¹⁵ An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

¹⁴ Mountain Biking: A Review of the Ecological Effects, Feb 2010 Miistakis Institute, Canada, found at: https://www.lib.washington.edu/msd/norestriction/b67566091.pdf

ESTABLISH BIOLOGICAL TRANSITION ZONES AND BUFFER ZONES

The Goals Report states: "The ecosystem services of the T-zone [or transition zone] relate strongly to its role in connecting the baylands and their local watersheds (e.g., Ewel et al. 2001). ...Much of the food web of the intertidal portion of the T-zone is [important to the survival of wildlife communities]. [The] functional relationships between the T-zone and local watersheds should be emphasized.¹⁷ This same report states that "buffer zones [establish] setbacks along watercourses that link tidal marshes to healthy riparian corridors. Such buffers enable wildlife movement through the built environment."¹⁸ The plan should establish transition and buffer zones that enhance ecosystem services and reduce significant impacts."

AVOID HABITAT FRAGMENTATION AND CONNECT HABITAT PATCHES

The Goals Report states: "A mosaic of habitat patches allows an array of species to persist, but only if the mosaic components are functionally connected."¹⁹ The Plan should establish wildlife corridors as Special Protection Areas that preserve functional connectivity of habitat patches within the Project area and join the mosaic components with Eden Landing and Don Edwards National Wildlife Refuge.

REVIEW A FULL INVENTORY OF SPECIAL STATUS BIRD SPECIES AND UPDATE THE STATUS OF ALL SPECIAL STATUS SPECIES, INCLUDING THE STATE THREATENED TRICOLORED BLACKBIRD

While Table 4.1-1 on page 80ff of the dEIR includes some special status species, it is incomplete.²⁰ Other special status species, such as the Olive-sided Flycatcher, a California Species of Special Concern, were not included on the list. Therefore, GGAS urges that a full accounting of special status species be included in the baseline environmental conditions and assessed for potential impacts in the draft EIR and LUPA. Citizen science bird watching reports include 284 bird species plus 65 taxa in the Project area.²¹ Additional special status species are listed in this eBird report and should be considered in the draft plan.

GGAS-9

GGAS-10

¹⁷ pp1, 4 Baylands Ecosystem Habitat Goals Science Update (2015) Science Foundation Chapter 4 Connections to the Watersheds: The Estuarine-Terrestrial **Transition Zone**

Found at: https://baylandsgoals.org/wp-content/uploads/2015/10/BEHGU_SFC4.pdf

¹⁸ Ibid p34

¹⁹ p1. Risks from Future Change for Wildlife Chapt5, in Baylands Ecosystem Habitat Goals Science Update (2015)

Found at: https://baylandsgoals.org/wp-content/uploads/2015/10/BEHGU_SFC5.pdf ²⁰ p80ff dEIR

 $^{^{21}}$ 284 species + 65 tax reported and found at: https://ebird.org/hotspot/L216132?yr=all&m=&rank=mrec&hs_sortBy=taxon_order&hs_o=asc_

The dEIR is inadequate when it fails to document the new status of the tricolored blackbird that is currently classified as State Threatened. ²² Changes in special status must be accounted for so that associated permitting and mitigations meet agency and CEQA requirements.

REFER TO A BASELINE STUDY OF EXISTING ENVIRONMENTAL CONDITIONS TO ASSESS RESOURCES AND WILDLIFE INVENTORY IMPACTS BEFORE OPENING TRAILS TO MULTI-USE ACTIVITIES

GGAS urges the District to limit activities and measure impacts so that a reliable basis for determining the scope of allowable activity will derive from the best available science. This approach may help reduce significant effects to less than significant. The Plan should seek to avoid significant impacts to sensitive habitat, nesting birds, rare sensitive plants and other wildlife by restricting excessive and intensive recreational activities and designating Special Protection Areas for high value habitat that is potentially occupied by special status species.

Thank you for this opportunity to comment on the dEIR and dLUPA for the Coyote Hills Restoration and Public Access Project. Please keep GGAS informed about all activities and reports relating to this matter.

Respectfully,

Pam Young

Pam Young Member, GGAS Board of Directors Chair, GGAS East Bay Conservation Committee <u>pamyoung2@mac.com</u> GGAS-12

 ²² California Department of Fish and Wildlife, Natural Diversity Database. November 2018.
 Special Animals List. Periodic publication. 67 pp.
 Found at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406

Coyote Hills Park Expansion dEIR: Accuracy check of list of special status birds

Overall: 1. The special status category of Tricolored blackbird and Ferruginous hawk were incorrectly Isted in dEIR Table 4-1;

 2. The e-bird checklist had the following special status species that were not lised in dEIR Table 4-1: Brant, Redhead, Barrow's Goldeneye, Vaux's Swift, Costa's Hummingbird, Rufous Hummingbird, Sandhill Crane, Long-billed Curlew, California Gull, Caspian Tern, Elegant Tern, Black Skimmer, Common Loon, Double-crested Cormorant, American Pelican, White-faced Ibis, **Bald Eagle**, Swainson's Hawk, Olive-sided Flycatcher, Lawrence's Goldfinch, Grasshopper Sparrow;
 3. Pam Llewelyn's list also had: Double-crested Cormorant, American White Pelican, California Gull, Caspian Tern, Olive-sided Flycatcher, Barrow's Goldeneye, Long-billed Curlew (these are all represented in e-bird observations).

Species Listed in dEIR	Status in dEIR	Current CDFW status Note "S" for state instead of "C" for CA	Discrepancy?	Other Notes	
Alameda Song Sparrow	Fed/State = None Other = CSC, BCC	SSC (same as CSC), BCC	No	Moderate Potential, Not observed	
CA Black Rail	Fed/State = ST Other = BCC, CFP	ST, CFP, BCC	No	Moderate Potential - habitat	
CA Ridgway's Rail	Fed/State = FE, SE Other = CFP	FE, SE, CFP	No	Spelled wrong in dEIR Low Potential – "Unlikely to occur w/in Park Expansion Project area due to lack of suitable habitat:	
Cooper's Hawk	Fed/State = None Other = CWL	CWL	No – but you said Cooper's was SSC – Nov 2018 CDFW list only has as CWL – has status changed more recently?	Moderate Potential	
Tricolored Blackbird	Fed/State = CDE Other = BCC, CSC	SE, SSC, BCC	Yes – not a CDE (candidate species), now a CE (endangered species)	High Potential - observed	GGAS 17
Yellow Headed Blackbird	Fed/State = None Other = CSC	SSC	No	Low Potential Yellow Headed → Yellow-headed	
Burrowing Owl	Fed/State = None Other = BCC, CSC	SSC, BCC	No	High potential, observed winter 2002 – 2003, May 2007	
White Tailed Kite	Fed/State = None Other = CFP	CFP	No	High Potential – Observed 200, 2001 H.T. Harvey Survey	
Golden Eagle	Fed/State = FBGE Other = CFP, CWL, BCC	FBGE, CFP, CWL, BCC	No	High – observed Coyote Hills	
Northern Harrier	Fed/State = None Other = CSC	SSC	No	High Potential – observed in 2007	
Saltmarsh Common Yellowthroat	Fed/State = None Other = CSC, BCC	SSC, BCC	No	Moderate potential, occurs in Coyote Hills Park immediately adjacent	
Bank Swallow	Fed/State = State threatened Other =	ST	No	High potential – observed 1983 CNDDB, spring 2016	
Western Snowy Plover	Fed/State = Federally Listed	FT, SCC, BCC	No	No Potential	

1. dEIR Special Status Birds List vs CDFW Special Animals List

	Other = CSC, BCC			
Ferruginous Hawk	Fed/State = None Other = BCC	CWL, BCC	Missing CWL in dEIR	Moderate potential
American Peregrine Falcon	Fed/State = Federally delisted Other = CFP, BCC	Delisted, CFP, BCC	No	High potential - observed
Loggerhead Shrike	Fed/State = None Other = CSC, BCC	SSC, BCC	No	High potential – observed, known to occur in project area
Short-eared Owl	Fed/State = None Other = CSC	SSC	No	High Potential – observed
Yellow Breasted Chat	Fed/State = None Other = CSC	SSC	No	Moderate potential - Habitat
Sharp-shinned Hawk	Fed/State = None Other = CWL	CWL	No	High potential – known to occur
Prairie Falcon	Fed/State = None Other = CWL	CWL	No	High potential – "has been rarely observed"
Merlin	Fed/State = None Other = CWL	CWL	No	Moderate potential – observed in Coyote Hills park
Osprey	Fed/State = None Other = CWL	WL	No	Moderate Potential – observed in Coyote Hills park
Long Eared Owl	Fed/State = None Other = CSC	CSC	No	Moderate Potential – observed in Coyote Hills
Yellow Warbler	Fed/State = None Other = CSC, BCC	SSC, BCC	No	High potential – observed in Patterson Slough
CA Horned Lark	Fed/State = None Other = CWL	CWL	No	High potential – observed in Coyote Hills
Southwest Willow Flycatcher	Fed/State = Fed and State endangered Other =	FE, SE,	No	Moderate potential – observed in Coyote Hills

2. dEIR Special Status Birds List vs Coyote Hills e-bird (any listed species missing?) Quite a few missing – although some shore/oceanic birds (like black skimmer, common loon) probably have no likelihood of going that far inland. I added the category from the CDFW species list next to the species name

Fulvous Whistling-Duck: SSC	1	<u>22 Mar</u> <u>1970</u>	<u>Richard</u> Erickson	
Brant: SSC	1	<u>28 Aug</u> 2011	<u>logan</u> <u>kahle</u>	
Redhead: SSC	4	<u>16 Dec</u> 2018	lorm (GGAS- 18
Barrow's Goldeneye11 Jan 2019Jerry Ting				
Vaux's Swift: SSC	1	<u>19 Sep</u> 2018	<u>Bob</u> Dunn	
Costa's Hummingbird: BCC	1	<u>6 Sep</u> 2008	<u>Patricia</u> Bacchetti	<u> </u>

Rufous Hummingbird: BCC					1	<u>23 Se</u> 201		-
Sandhill Crane: Lesser (SSC) or g	reater (F	P)?			1	<u>2 Oo</u> 201		n
Long-billed Curlew: SWL, BCC					2	<u>30 Ma</u> 201		all
California Gull: CWL					2	<u>17 Ap</u> 201		
Caspian Tern: BCC					2	<u>3 No</u> 201		
Elegant Tern: CWL					7	<u>3 No</u> 201		GGAS- 18 (Cont.)
Black Skimmer: SSC					1	<u>18 Ju</u> 201		
Common Loon: SSC					1	<u>13 Oo</u> 201		<u>0</u>
Double-crested Cormorant: CWL					3	<u>14 Ap</u> 201		
American White Pelican: SSC				1		4 Apr 2019	J Tanner	
Brown Pelican: CFP				10	<u>1</u> ;	<u>3 Dec</u> 2018	J Tanner	
White-faced Ibis: CWL				2		<u>5 Mar</u> 2019	J Tanner	
Bald Eagle: Federally Delisted, CE	, CFP, B	SCC		1	<u>2</u>	<u>9 Mar</u> 2019	J Tanner	
Swainson's Hawk: ST, BCC	х	<u>23 Nov</u> 2012	Jim Ford					
Olive-sided Flycatcher: SSC, BCC	1	<u>8 May</u> 2018	J Tanner					
Willow Flycatcher: SE, BCC	1	<u>22 Sep</u> 2018	Elizabeth Olin					
	2	<u>16 Mar</u>	Carla Delucchi					

Lawrence's Goldfinch: BCC		<u>2008</u>		GGAS-
Grasshopper Sparrow: SSC	1	<u>18 Sep</u> <u>2018</u>	J Tanner	18 (Cont.)

3. dEIR Special Status Birds List vs Pam Llewelyn's GGAS article about Coyote Hills

Attachment 1. dEIR Coyote Hills Special Status Spp Birds.

One species listed on attachment left off the dEIR: Southwestern willow flycatcher (Empidonax traillii extimus)

GGAS-

19

Attachment 2

Special Status Birds Missing from dEIR Table 4-1: Double-crested Cormorant: CWL American White Pelican: SSC California Gull: CWL Caspian Tern: BCC Olive-sided Flycatcher: SSC, BCC Barrow's Goldeneye: SSC Long-billed Curlew: CWL, BCC

Already in Table 4.1 Saltmarsh Common Yellowthroat, White-tailed Kite, Northern Harrier, Merlin, Loggerhead Shrike:

Citations for References in GGAS Comment to EBRPD Coyote Hills dEIR dLUPA Apr2019 PYoung

Baylands Ecosystem Habitat Goals Science Update (2015) Found at: https://baylandsgoals.org/wp-content/uploads/2016/10/Baylands-Complete-Report-2016.pdf

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Baylands Ecosystem Habitat Goals Science Update (2015) Science Foundation Chapter 4 Connections to the Watersheds: The Estuarine-Terrestrial Transition Zone

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California Department of Fish and Wildlife, Natural Diversity Database. November 2018. Special Animals List. Periodic publication. 67 pp. Found at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406

California Department of Fish and Wildlife and California Attorney General Xavier Becerra Advisory Affirming California's Protections for Migratory Birds November 29, 2018 Found at: <u>https://oag.ca.gov/system/files/attachments/press-docs/20181129mbta-advisory3.pdf</u>

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East Bay Regional Park District Coyote Hills Restoration & Public Access Project Draft EIR, March 7, 2019 Found at: https://www.ebparks.org/civicax/filebank/blobdload.aspx?blobid=32001

East Bay Regional Park District Coyote Hills Restoration and Public Access Project Draft Land Use Plan Amendment, February, 2019 Found at: https://www.ebparks.org/civicax/filebank/blobdload.aspx?blobid=32002

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Response GGAS-1

This comment provides general background and summary information and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response GGAS-2

The Project proposes to protect, enhance and restore approximately 230 acres of willow sausal, mixed riparian forest, oak savanna and wetlands out of the 306 acre project area. The 230 acre total includes approximately 130 acres within the Patterson Slough and Western Wetlands Natural Units, and approximately 100 acres in the Southern Wetlands Natural Unit. Not counted in this 230 total are areas of existing and proposed roads, trails parking areas, picnic facilities, the existing farm yard area, or the approximately 45-acre farm field. The existing and proposed infrastructure and visitor serving facilities, and ruderal or weedy perimeter areas that will not be enhanced and not counted in the restoration and enhancement acreage, total approximately 31 acres.

Of the approximately 230 acres that will be restored or enhanced, 130 acres will be the responsibility of the Park District, and approximately 100 acres will be the responsibility of the Alameda County Flood Control and Water Conservation District. Some of this acreage along Ardenwood Creek/Line P was recently restored to riparian vegetation by them. The remainder will be constructed and operated to offset future flood control wetland and habitat impacts.

The focus of the Southern Wetlands Natural Unit is on habitat creation. Public access would utilize maintenance access roads that will be constructed for habitat maintenance purposes - no "trail only" features will be constructed. Restoration and habitat enhancement benefits will far off-set temporary project impacts to current low habitat value/ruderal conditions.

See also Response CCCR-20, which provides a summary by total acres and percentage of area of the LUPA proposed land use and land cover types (restored and enhanced areas, agriculture, trails, parking and infrastructure, etc.) This response also provides background on the 2013 Park District Master Plan, including defining typical land uses and cover types by type of facility, for instance Regional Parks, Regional Recreation Areas, and Regional Preserves.

Proposed trails and recreational facilities will occupy less than about 11% of the Park Expansion Area.

Response GGAS-3

Detailed, year-long biological surveys, as requested by the commenter are not required under CEQA; what is required is that the baseline biological information collected be adequate to describe existing conditions, allow for an analysis and quantification of potential biological impacts, and the development of mitigation measures that can be implemented, along with a monitoring and reporting program and contingencies, to document and insure success. The biological, (and soils and hydrologic) information collected and assembled to date more than meets this requirement.

One of the principal contributors to the LUPA, EIR, and restoration plan concepts is Dr. Samuel McGinnis, Professor Emeritus of Wildlife Biology at East Bay State University, Hayward; and author of a number of books on San Francisco Bay Area Wildlife.

Dr. McGinnis has been visiting Coyote Hills Regional Park, conducting biological investigations and bringing student classes to Coyote Hills for over 30 years and brings a wealth of knowledge and experience with the biology of this area, transcending all seasons during this time period. For instance he completed detailed biological investigations for the District at Coyote Hills in 1989-1990.

The project study team also consulted with District biologists and staff assigned to Coyote Hills Regional Park who are also very familiar with the biology of the Park, both seasonally and through wet and drought years.

District Staff and consultant team members continue to observe biological conditions within the Project area and would do so over the next 7-10 year estimated implementation period and beyond as part of the District's restoration and maintenance program development. Anticipated regulatory permits will also likely require field studies and monitoring over a 7 to 10 year period. This information as well as staff monitoring of soils and hydrology will be used in adaptive management.

The Park District is currently conducting pilot test plot native plant trials to better inform design of the detailed Restoration Plan. In addition to biological observations, the ongoing field work also includes gathering information on site soils and groundwater conditions. This information will be used for short-term and long-term adaptive management.

Regarding the commenter's recommendation of restricting activities or closing trails (such as the Slough Overlook spur on the west side of Patterson Slough and the Tule Overlook Spur, in the Southern Wetlands Natural Unit), these are potential action that are already included in the LUPA (page 91) and are a part of proposed Adaptive Management discussed on pages 21, 25, 28, and 82 of the LUPA.

These and sections of all trails are subject to periodic or seasonal closure based on monitoring and observations of Park District staff. Trail closure would be due to the need to repair habitat damage, install erosion control and stormwater management measures, repair trail drainage problems, or because of the seasonal presence of sensitive wildlife, such as nesting birds, or Special Status bird species, such as tricolored blackbirds, in the vicinity of trails or wildlife observation platforms. This would be a determination made by Park District staff with concurrence of the Regional Park Manager and District General Manager.

See also Response CCCR-7 and CCCR-13.

The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Mitigation measures identified in the Draft EIR would reduce all impacts of the Project on biological resources to a less-than-significant level. Additional analysis is not required.

See also Response CNPS-2.

Response GGAS-4

Use of existing trails by Park visitors and other ongoing management practices such as mowing for weed control and fire fuels suppression, and grazing near sensitive habitat areas is a baseline environmental condition, is not an impact of the Proposed Project, and is not subject to CEQA review of this Project. However, the District is diligent in managing Park resources and does decommission and/or temporarily close trails from time to time for resource protection and restoration, based on recommendations of staff biologists. This will continue to be the practice within the Park Expansion area.

The Project proposes no new trails through areas of existing sensitive biological resources or habitat occupied by listed species. Proposed trails are predominantly in ruderal areas with low existing habitat value. This is also the baseline environmental condition for evaluation of biological impacts. New trails would be constructed prior to, or concurrent with habitat restoration and enhancement work of existing ruderal areas. The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, includes mitigation measures that would reduce all impacts of the Project on biological resources to a less-than-significant level.

The comment regarding opposition to new trails, dog walking, and mountain biking in certain areas will be forwarded to the EBRPD Board for its consideration prior to any decision on the Project.

Response GGAS-5

It is true that some of the ruderal areas are may be occupied by ground nesting birds and a wide variety of birds, especially raptors, forage over these lands. Management and enhancement of these areas as part of the overall Restoration and Public Access Plan would greatly increase their habitat value. As noted in Response GGAS-3, the Project Study Team has a comprehensive knowledge of the Project area from previous and recent biological surveys and a long term knowledge and history of the general project area. The District will continue to assess and monitor LUPA biological resources prior to, during, and following project implementation.

However, for CEQA analysis purposes, restoring ruderal habitat to higher value habitat is not a significant impact requiring the area be designated a "Special Protection Feature" for mitigation, as suggested by the commenter. There is no special biological need or presence of sensitive species in the existing ruderal areas that require special protection. The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, includes mitigation measures that would reduce all impacts of the Project on biological resources to a less-than-significant level.

As noted in Response GGAS-3 and 4, District staff and management can designate certain areas as Special Protection Features, if needed, in the future, based on continuing adaptive management, monitoring and field observations, subject to Park District Board future approval.

Response GGAS-6

As noted on page 42 of the DEIR (Project Description) and on page 192, dogs (even on leashes) would be restricted from some Park expansion areas such as wetlands, willow sausal and mixed

riparian forest, while other areas will be designated "dog on leash only." There are no areas within the Park or expansion area where unleashed dogs are authorized. If the Proposed Project is implemented, the Park District would continue to use and enforce Ordinance 38 to guide where dogs are allowed, how they are managed, and how the Ordinance is enforced. The Proposed Project would not otherwise change existing policies or their enforcement., including with respect to Ordinance 38.

Response GGAS-7

Cumulative impacts of the Proposed Project on biological resources are evaluated on pages 127-129 of the Draft EIR, at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. The cumulative impact of the Proposed Project on biological resources, including the impacts on sensitive biological resources of Patterson Slough would be less than significant after mitigation.

There are no new trails proposed within Patterson Slough. A portion of an existing dirt maintenance road/trail would be upgraded to a spur trail with a wildlife observation platform. This is currently shown as an existing trail on Google Earth aerial imagery and has a long history of use for farming, farm labor housing, and maintenance access. The wildlife observation platform spur angles off the existing dirt road to a ruderal area more than 100 feet from the willow dripline or slough edge. Bicycles and dogs would not be allowed on this spur, and public access to the northwest into the existing and proposed enhancement area along Patterson Slough would be precluded by use of fencing, signage, and dense landscape plantings as provided for in the Park Development Plan described in Chapter 7, page 71 of the LUPA. LUPA page 91 indicates that the Spur Trail may be closed seasonally in the future as part of adaptive management, if monitoring by Park District staff indicates the need.

Response GGAS-8

As stated on page 12 of the LUPA, the Park District recognizes the value the Park expansion area provides in the increased wildland habitat acreage and by adding to the ecological complexity and diversity of the large Open Space area formed by the combination of Coyote Hills Regional Park, the Don Edwards Wildlife Refuge and Eden Landing Ecological Reserve. The project is designed with habitat connectivity to Alameda County Flood Control and Water Conservation District ("ACFCWCD") lands to the west and to the south and will provide internal corridor connections. Making wildlife corridor connections to adjacent refuges faces significant constraints such as the presence of existing roads, levees, structures, land ownership and utilities that are outside of the scope of the proposed project and would trigger additional environmental impacts and CEQA review. The project will not preclude or interfere with future project developers wishing to pursue implementing recommendations of the Bayland Ecosystem Habitat Goals Report and Update (Goals Report) to improve wildlife connectivity in this area. The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, includes mitigation measures that would reduce all impacts of the Project on biological resources to a less-than-significant level.

See also GGAS 10.

Response GGAS-9

The proposed Project establishes transition and buffer zones as proposed in this comment. The proposed Project establishes a 100-foot buffer zone (Creek Set Back) along the Patterson Slough Riparian Corridor. The riparian zone along Patterson Slough would transition from dominantly willows (in wettest areas) to mixed riparian forest, to dense oak woodland and open oak savanna to enhanced grasslands and seasonal wetlands. This pattern was based on research on the distribution of soil and hydrologic conditions that support these plant communities.

Response GGAS-10

The LUPA, CEQA documents, and Restoration and Public Access Plan scope and focus is on the 306-acre Park expansion areas, not the area to the west. This area is also under the ownership and control of the Park District and ACFCWCD, but is not part of the Proposed Project, and is not the subject of this EIR. The Park District will work with ACFCWCD, who own lands to the west, along with representatives of the Don Edwards Wildlife Refuge and Eden Landing Ecological Preserve in evaluating the feasibility and conceptual design of an improved wildlife corridor connecting all of these lands.

See also GGAS-8.

Response GGAS-11

Thank you for this information. The table and text on Special Status Species is edited and updated to include the recently changed status of the tricolored blackbird (now a State Threatened species).

As extensive edits were made throughout, Table 4.1-1, Special Status Wildlife Species, beginning on page 80 of the Draft EIR, is replaced in its entirety as follows for the convenience of the reader:

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
BIRDS				
Melospiza molodia pusillula	None	CSC, BCC	Present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation,	Moderate Potential: The Project area provides potential
Alameda Song Sparrow			high enough to avoid flooding during high tides.	habitat for this species with foraging and nesting habitat present.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Laterallus</i> <i>jamaicensis</i> <i>coturniculus</i> California Black Rail	State Threatened	BCC, CFP	Resident in marshland (saline to freshwater) with established, dense vegetation. Common in upper tidal zone of emergent wetlands or brackish marshes dominated by bulrush (<i>Scirpus</i> <i>spp.</i>), cordgrass (<i>Spartina spp.</i>), and pickleweed (<i>Salicornia spp.</i>), commonly found nesting in dense cover such as pickleweed. Prefers larger, undisturbed marshes close to a major water source.	Moderate Potential: Suitable nesting habitat exists to the west of the Project area in Coyote Hills Regional Park and CBR observed in adjacent Regional Park. Unlikely to occur within Park Expansion Project area due to lack of suitable habitat.
<i>Rallus longirostris</i> <i>obsolctus</i> California Ridgeway Rail	State Endangered Federal Endangered	CFP	Endemic to large salt and brackish marshes; requires shallow areas, tidal channels, or mudflats for foraging.	Low Potential: Species has been observed west of Project area in Coyote Hills Regional Park. Status of species breeding locations within Alameda county is undetermined, documented individuals may not have bred adjacent area. Project area does not contain suitable habitat.
<i>Accipiter cooperi</i> Cooper's Hawk	None	CWL	Nests and breeds within mixed riparian forests alongside creek banks. Forages in open grasslands, valleys, and foothills.	Moderate Potential: The mixed riparian forests, oak and willow clusters along Patterson Slough provide adequate nesting habitat for this species.
Agelaius tricolor Tricolored Blackbird	CDE	BCC, CSC	This species breeds within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes.	High Potential / Observed: Emergent freshwater thickets along Patterson Slough, K-line, and P-line channels provide nesting habitat. Species observed within Project area by H.T. Harvey (2001)

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Xanthocephalus xanthocephalus. Yellow headed blackbird	None	CSC	Migratory species that nests within emergent wetlands within dense thickets, deep water, and along the edges of lakes or large ponds. Forages on large aquatic insects during breeding season.	Low Potential: Rarely nests within the San Francisco Bay Area, Project area are not a sufficient breeding habitat.
Athene cuniculatia	None	BCC, CSC	Resident of open, dry grasslands/scrublands with low growing vegetation. Breeds, forages in open grasslands that contain small mammal burrows.	High Potential / Observed: Observed along the northern perimeter of the Project area during the winter of 2002-2003 (Dexter, Wendy. May 10 th -2007.) Species has also been observed within Coyote Hills Regional Park.
<i>Elanus leucurus</i> White Tailed Kite	None	CFP	Resident of coastal/valley lowlands of California. Nests in isolated stands of large shrubs or trees, surrounded by open grassland. Preys on small mammals, birds, insects, reptiles, and amphibians.	High Potential / Observed: Observed foraging within the Project area during field surveys. Breeding habitat is present on site. Observed in 2000 and 2001 nesting within mixed riparian forests (H.T. Harvey & Associates 2001).
Aquila chrysactos Golden Eagle	FBGE	CFP, CWL, BCC	Breeds and winters on cliff-walled canyons, and large trees within foothills, chaparral, sage-juniper flats mountain areas and deserts.	High Potential/Observed: Occurs within the Coyote Hills Regional Park and likely forages within the Project area.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Circus cyancus</i> Northern Harrier	None	- CSC	Nests within shrubby vegetation and forages in open grasslands, meadows, and wetlands.	High Potential / Observed: Nesting habitat present along the margins of Patterson Slough and the K-line and P-line channels. Suitable foraging habitat is present within the agricultural fields of the Project area. Species was observed in 2007, foraging, and documented breeding/nesting within Coyote Hills Regional Park.
Geothlypis trichas sinuosa Saltmarsh Common Yellowthroat	None	CSC, BCC	Found in dense, mixed riparian thickets, and forests along waterways.	Moderate Potential: Suitable habitat and nesting grounds are present in the mixed riparian forest along Patterson Slough. Known to occur in Coyote Hills Park to the immediate west of the Project Area.
Riparia riparia Bank Swallow	State Threatened		Migratory species to lowland and riparian habitats within coastal California. Nests in colonies along vertical cliffs with fine textured sandy soils near streams, lakes, or ocean.	High Potential / Observed: A possible colony was noted in a 1983 CNDDB observation within the Project area; and several nests were observed and protected under the Line P culvert crossing of Paseo padre Blvd in Spring 2016.
Charadrius alexandrines nivosus Western Snowy Plover	Federally Threatened	CSC, BCC	Resident of sandy beaches, salt pond levees and the banks of alkali lakes. Nesting habitat is sandy/gravely soils.	No Potential: Project area does not contain suitable habitat for nesting.

				Potential for
Scientifie Name Common Name	Federal / State Status	Other Status	Habitat Association	Occurrence in Project area
<i>Buteo regalis</i> Ferruginous Hawk	None	BCC	Preys upon lagomorphs (ground squirrels, mice, etc) within open grasslands, sage brush flats, desert serub, and low foothills, valleys.	Moderate Potential: Suitable foraging habitat is present within the Project area for wintering; species has not been documented to breed within Project area but is rarely observed within the adjacent Coyote Hills Regional Park.
Falco peregrines anatum American Peregrine Falcon	Federally Delisted	CFP, BCC	Resident species that forages within coasts, bays, marshes (primarily on waterbirds) and other wetland areas. Nests in protected cliff, ledges or manmade structures.	High Potential / Observed: No suitable breeding/nesting habitat is present within the Project area. Species may be seen foraging or soaring over Project area.
Lanius ludovicianus Loggerhead Shrike	None	CSC, BCC	Inhabit open woodland areas with short well-spaced vegetation, particularly those with spines or thorns.	High Potential / Observed: Has been observed and is known to occur within the Project area.
<i>Asio flammeus</i> Short-cared Owl	None	CSC	Migratory species that can be found in grasslands and open areas. They perch in low trees or on theythe ground.	High Potential / Observed: Has been observed and is known to occur within the Project area.
Icteria virens Yellow Breasted Chat	None	CSC	Habitat consists of dense growth along waterways	Moderate Potential: The mixed riparian forest along Patterson Slough may provide potential nesting / foraging habitat.
Accipter striatus Sharp-shinned Hawk	None	CWL	Habitat includes mixed or coniferous forests, deciduous woodlands, and thickets. Often nests within groves of coniferous trees in mixed woods, sometimes in dense deciduous trees or pure coniferous forests with brush or clearings nearby. Tends to avoid open country	High Potential: Known to occur in the neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest and/or ruderal grassland.

Scientifie Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Falco mexicanus</i> Prairie Falcon	None	CWL	Resident of open hills, plains, prairies, deserts. Typically found in fairly dry, open country, including grassland and desert. In winter can be found in farmland and around lakes and reservoirs, typically scarce around immediate coast.	High Potential: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Falco columbarius</i> Merlin	None	CWL	Habitat includes Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally breeds in semi-open terrain having trees for nest sites and open areas for hunting. May winter in more open areas, such as grasslands, coastal marshes.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Pandion haliatus</i> Osprey	None	GWL	Rivers, lakes, coast. Found near water, either fresh or salt, where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around large lakes, reservoirs, rivers. Migrating Ospreys are sometimes seen far from water, even over the desert.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within freshwater/saline seasonal wetlands or wetland mitigation area to the south of the site along Line P.
Asio otus Long Eared Owl	None	CSC	Woodlands, conifer groves. Favored habitat includes dense trees for nesting and roosting, open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or deciduous trees in prairie country, streamside groves in desert. Generally avoids unbroken forest:	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Dendroica petechia brewstri Yellow warbler	None	CSC, BCC	Bushes, swamp edges, streams, gardens. In west, restricted to streamside thickets.	High Potential/Observed: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.
Eremophila alpestris actia California horned lark	None	CWL	Prairies, fields, airports, shores, tundra. Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of situations that are sufficiently open: short grass prairies, extensive lawns (as on airports or golf courses), plowed fields, stubble fields, beaches, or lake flats.	High Potential: migrant bird that has been observed infrequently within neighboring Coyote Hills Regional Park. Suitable foraging habitat may be present within the ruderal grasslands, or agricultural fields of the Project area.
Empidonax traillii extimus Southwestern Willow Fly Catcher	Federally Endangered State Endangered		Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes (especially in southern part of range).	Moderate Potential: species is a rare migrant but has been observed in neighboring Coyote Hills Regional Park. Project area may provide suitable habitat within the willow thickets / mixed riparian forest along Patterson Slough.
MAMMALS	1	1		I
Sorex vagrans halicoetes Salt Marsh Wandering Shrew	None	CSC	Resident of high marshland (2-3 MASL) of the south San Francisco Bay that contains scattered driftwood.	No Potential: Suitable habitat is present in the salt marshes surrounding the Project area. Poor habitat suitability within the Project area, species documented less than 2 miles from Project area.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Reithrodontomys raviventris Salt Marsh Harvest Mouse	Federally Endangered State Endangered	CFP	Saline wetlands of the San Francisco Bay and its tributaries; associated with pickleweed	Low Potential: suitable marsh habitat (pickleweed) does not occur within the Project area/Park Expansion area. The species has been documented to occur in the saline seasonal wetlands north of Patterson ranch road, as well as to the west and south of the Project Area.
Antrozous pallidus Pallid Bat	None	CSC, WBWG High	Roosts along rocky outcrops, cliffs, oak trees, and is also known to utilize buildings and the underside of bridges as roosting sites.	Moderate Potential: Suitable roosting habitat is present within the Project area within, Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.
Lasiurus blosevilli Western Red Bat	None	CSC, WBWG High	Solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. Known to be very tolerant of human activity.	Moderate Potential: Suitable habitat within Project area is present along K/P line channels, in mixed riparian forest stands of Patterson Slough, and in farm buildings.
<i>Myotis thysanodes</i> Fringed Myotis	None	WBWG High Priority	Resident of various woodland habitats roosting in crevice or caves. Forages over open habitats and water bodies.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Myotis Volans	None	WBWG High Priority	Inhabitant of various woodland habitats surrounding bodies of water and open habitats. Roosts in crevices or caves.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
Corynothinus townsendii Townsend's Big- Eared Bat	None	CSC, WBWG High Priority	Migratory bat associated with various habitats throughout California including desert scrub, mixed conifer forest, or pine forest habitat Specifically associated with limestone caves, mines, lava tubes, and buildings.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
FISH				
Oncorhynchus mykiss irideus Steelhead (Central Coast ESU)	Federally Threatened NMFS		Very flexible life cycle patterns ranging from freshwater residents (non- migratory) to anadromous where adults travel upstream to the Russian river to spawn in cool, clear, well- oxygenated streams. Juveniles remain in these streams for at least 1 year before returning downstream through tributaries such as the Soquel Creek, or Pajaro River to the San Francisco and San Pablo Bay basins.	Low Potential: Unlikely to occur within the Project area, however the flood control channels of Alameda Creek Flood Control Channel are documented as being utilized by steelhead. These lands are outside of the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the channel will need to consider impacts to this protected species.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
AMPHIBIANS				
Actinemys marmorata Western (Pacific) Pond Turtle	None	CSC	Resident of perennial ponds lakes, rivers and streams and even irrigation ditches. Requires suitable basking habitat (logs, floating vegetation) mud- banks, and a shelter that is submerged.	Moderate Potential: Pond turtles have been documented at the adjacent Coyote Hills Regional Park and at upstream (4.5 miles) sections of Alameda Creek. The species could potentially disperse into the Project area. Species has not been observed within the Project area; very limited egg laying sites are available.
Rana draytonii California Red- Legged Frog	Federally Threatened	CSC	Most common in lowlands or foothills. Found near ponds in humid forests, woodlands, grasslands, coastal shrub, and streamside with plant cover. Historically, found along the coast and Coast Ranges from Northern California to northern Baja California.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
Ambystoma californiense California Tiger Salamander	Federally Threatened State Threatened	CWL	Resident of grasslands and low foothills with pools or ponds that are necessary for breeding.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
INVERTEBRATES				I
<i>Danaus plexippus</i> Monarch Butterfly	Federal Candidate	Roosts Protected by CDFW	Winter nesting habitat ranges from Mendocino to Baja California, Mexico along the California coast. Monarchs typically nest in wind protected groves (Eucalyptus, Monterey Pine, and Monterey Cypress) in locations with close proximity to nectar and water sources.	Moderate Potential: Documented roosting sites occur within 0.5 miles of the Project area and individuals may be observed during periods of the year foraging within the Project area. Mixed Riparian forest likely does not support a suitable habitat for roosting/overwintering T

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Lepidurus packardi</i> Vernal Pool Tadpole Shrimp	Federally Endangered		Reside in a wide variety of seasonal pools throughout the grasslands of the central valley. The water can be clear to murky and between 50-84 degrees Fahrenheit.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys
Branchinecta lynchi Vernal Pool Fairy Shrimp	Federally Threatened		Reside in a wide variety of seasonal pools including vernal pools, alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops within grassland habitat.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys

Key to Sensitive Wildlife Species Status Codes

	Federal				
FE	Federal Endangered				
FT	Federal Threatened				
FD	Federal Delisted				
FC	Federal Candidate				
FBGE	Federal Bald Eagle and Golden Eagle Protection Act				
BCC	USFWS Birds of Conservation Concern				
MMPA	Species protected under the Marine Mammal Protection Act				
NMFS	Species under the Jurisdiction of the National Marine Fisheries Service				
WBWG	Western Bat Working Group (High or Medium) Priority Species				
	State				
CE	California Endangered				
CT	California Threatened				
CSC	California Species of Special Concern				
CWL	California Watch List Species				
CFP	California Fully Protected				
CDE	California Candidate Endangered Species				
Species Evaluation					
No Potential: Hab	vitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate,				
	, plant community, site history, disturbance regime).				
Low Potential: Few of the habitat components meeting the species requirement are present, and/or the majority of habitat					
on and adjacent to the	he site is unsuitable or of very poor quality. The Species is not likely to be found on the site.				
Moderate Potentia	<u>It</u> Some of the habitat components meeting the species requirements are present, and/or only some of				

the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

High Potential: All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Observed: Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Based on review of the biological literature of the region, information presented in previous site investigations and an evaluation of the habitat conditions of the Project area and surrounding vicinity, the following special status species presence criteria were developed for evaluating the presence of Special Status species within the Project area, as indicated in **Table 4.1-1**:

		ЕАЅТ	ВАУ	Y REGIONAL	PARK	DISTRICT
Соуоте	HILLS RES	ГОКАТ	ΓΙΟΝ	& PUBLIC A	ACCESS	S PROJECT
	Соммн	NTSA	AND	RESPONSES	FOR D	RAFT EIR

No Potential	(1) The species' specific habitat requirements are not present
	(2) The species is presumed, based on the best scientific information available, to be extirpated from the Project area or region.
Low Potential	(1) Species' known current distribution or range is outside of the Project area
	(2) Only limited or marginally suitable habitat is present within the Project area
Moderate Potential	(1) There is low to moderate quality habitat present within the Project area or immediately adjacent areas.
	(2) The Project area is within the known range of the species, even though the species was not observed during reconnaissance surveys.
High Potential	(1) Moderate to high quality habitat is present within the Project area
	(2) The Project area is within the known range of the species
	(3) The species was documented as occurring within the Project area during reconnaissance surveys or was observed within similar habitat adjacent to the project area.

Special Status wildlife species are shown in Table 4.1-1 and Figure 4-1.3.

TABLE 4.1-1 Special Status Wildlife Species

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
BIRDS				
<u>Melospiza molodia</u> <u>pusillula</u> <u>Alameda Song</u> <u>Sparrow</u>	None	<u>CSC, BCC</u>	Present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides.	High Potential: Individuals observed within the Southern Wetlands Natural Unit of the Project area as recently as January 2019 per ebird, as well as just below Patterson slough in April 2011. The Project area provides potential habitat for this species.
<u>Laterallus</u> j <u>amaicensis</u> <u>coturniculus</u> <u>California Black Rail</u>	<u>State</u> <u>Threatened</u>	BCC, CFP	Resident in marshland (saline to freshwater) with established, dense vegetation. Common in upper tidal zone of emergent wetlands or brackish marshes dominated by bulrush (<i>Scirpus</i> <i>spp.</i>), cordgrass (<i>Spartina spp.</i>), and pickleweed (<i>Salicornia spp.</i>), commonly found nesting in dense cover such as pickleweed. Prefers larger, undisturbed marshes close to a major water source.	Low Potential: Individuals have been observed west of the Project area within adjacent Coyote Hills Regional Park. Unlikely to occur within Park Expansion Project area due to lack of suitable habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Rallus longirostris obsoletus California Clapper (Ridgeway) Rail	State Endangered <u>Federal</u> Endangered	CFP	Endemic to large salt and brackish marshes; requires shallow areas, tidal channels, or mudflats for foraging.	Low Potential: Species has been observed west of Project area in Coyote Hills Regional Park as recently as December of 2018 per e-bird. Status of species breeding locations within Alameda county is undetermined, documented individuals may not have bred adjacent area. Project area does not contain suitable habitat.
<u>Accipiter cooperi</u> Cooper's Hawk	None	CWL	<u>Nests and breeds within mixed</u> <u>riparian forests alongside creek banks.</u> <u>Forages in open grasslands, valleys,</u> <u>and foothills.</u>	Moderate Potential: The mixed riparian forests, oak and willow clusters along Patterson Slough provide adequate nesting habitat for this species.
<u>Agelaius tricolor</u> Tricolored Blackbird	<u>State</u> <u>Threatened</u> (April 2018)	BCC, CSC	This species breeds within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes.	High Potential: Emergent freshwater thickets along Patterson Slough, K- line, and P-line channels provide nesting habitat. Species observed foraging and roosting along the P- line channel by H.T. Harvey in June of 2001.
Xanthocephalus xanthocephalus. Yellow headed blackbird	None	<u>CSC</u>	Migratory species that nests within emergent wetlands within dense thickets, deep water, and along the edges of lakes or large ponds. Forages on large aquatic insects during breeding season.	Low Potential: Rarely nests within the San Francisco Bay Area, Project area are not a sufficient breeding habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Athene cunicularia Burrowing Owl	None	BCC, CSC	Resident of open, dry grasslands/scrublands with low growing vegetation. Breeds, forages in open grasslands that contain small mammal burrows.	High Potential: Observed along the northern perimeter of the Project area during the winter of 2002- 2003 (Dexter, Wendy, May 10 th 2007.) Species has also been observed west of the Project area within Coyote Hills Regional Park.
<u>Elanus leucurus</u> White Tailed Kite	None	<u>CFP</u>	Resident of coastal/valley lowlands of California. Nests in isolated stands of large shrubs or trees, surrounded by open grassland. Preys on small mammals, birds, insects, reptiles, and amphibians.	High Potential: Observed foraging within the Project area during field surveys. Breeding habitat is present on site. Observed in 2000 and 2001 nesting within mixed riparian forests (H.T. Harvey & Associates 2001).
<u>Aquila chrysaetos</u> Golden Eagle	<u>FBGE</u>	<u>CFP, CWL,</u> <u>BCC</u>	Breeds and winters on cliff-walled canyons, and large trees within foothills, chaparral, sage-juniper flats mountain areas and deserts. Hunts mainly mammals in remote, open country from grasslands to steppes and mountainous areas.	High Potential: Occurs within the Coyote Hills Regional Park west of the project area and likely forages within the ruderal grasslands of the Project area.
<u>Circus cyaneus</u> <u>Northern Harrier</u>	None	<u>_CSC</u>	Nests within shrubby vegetation and forages in open grasslands, meadows, and wetlands.	High Potential: Nesting habitat present along the margins of Patterson Slough and the K-line and P-line channels. Suitable foraging habitat is present within the agricultural fields of the Project area. Species was observed in 2007, foraging, and documented breeding/nesting within Coyote Hills Regional Park.

Scientific Name	Federal /	Other		Potential for
Common Name	State Status	Status	Habitat Association	Occurrence in Project
				area
<u>Geothlypis trichas</u> <u>sinuosa</u> <u>Saltmarsh Common</u> <u>Yellowthroat</u>	None	<u>CSC, BCC</u>	Found in dense, mixed riparian thickets, and forests along waterways.	Moderate Potential: Suitable habitat and nesting grounds are present in the mixed riparian forest along Patterson Slough. Known to occur in Coyote Hills Park to the immediate west of the Project Area.
<u>Riparia riparia</u> Bank Swallow	<u>State</u> <u>Threatened</u>		Migratory species to lowland and riparian habitats within coastal California. Nests in colonies along vertical cliffs with fine textured sandy soils near streams, lakes, or ocean.	Low Potential: A possible colony was noted in a 1983 CNDDB observation within the Project area; no other individuals have been observed to date.
<u>Charadrius</u> <u>alexandrines nivosus</u> <u>Western Snowy Plover</u>	<u>Federally</u> <u>Threatened</u>	<u>CSC, BCC</u>	Resident of sandy beaches, salt pond levees and the banks of alkali lakes. Nesting habitat is sandy/gravely soils.	<u>No Potential: Project</u> <u>area does not contain</u> <u>suitable habitat for</u> <u>nesting.</u>
Buteo regalis Ferruginous Hawk	None	BCC	Preys upon lagomorphs (ground squirrels, mice, etc) within open grasslands, sage brush flats, desert scrub, and low foothills, valleys.	Moderate Potential: Suitable foraging habitat is present within the ruderal grassland of the Project area for wintering; species has not been documented to breed within Project area but has been observed within the adjacent Coyote Hills Regional Park.
<u>Falco peregrines</u> <u>anatum</u> <u>American Peregrine</u> <u>Falcon</u>	<u>Federally</u> <u>Delisted</u>	<u>CFP, BCC</u>	Resident species that forages within coasts, bays, marshes (primarily on waterbirds) and other wetland areas. Nests in protected cliff, ledges or manmade structures.	High Potential: Species has been observed in the north eastern corner of the project area along Paseo Padre Parkway in November of 2017, per e-bird. Individuals may be seen foraging or soaring over Project area.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Lanius ludovicianus Loggerhead Shrike	None	CSC, BCC	Inhabit open woodland areas with short well-spaced vegetation, particularly those with spines or thorns.	High Potential: Has been observed within the project area in the Southern Wetlands Natural Unit in January of 2018, per e-bird.
<u>Asio flammeus</u> Short-eared Owl	None	CSC	Migratory species that can be found in grasslands and open areas. They perch in low trees or on the ground.	High Potential: Has been observed west of the Project area within Coyote Hills Regional Park as recently as January 2019. Potential foraging habitat may be present within the ruderal grassland habitat of the Project area.
<u>Icteria virens</u> <u>Yellow Breasted Chat</u>	None	<u>CSC</u>	Habitat consists of dense growth along waterways	Moderate Potential: The mixed riparian forest along Patterson Slough may provide potential nesting / foraging habitat.
<u>Accipter striatus</u> Sharp-shinned Hawk	None	CWL	Habitat includes mixed or coniferous forests, deciduous woodlands, and thickets. Often nests within groves of coniferous trees in mixed woods, sometimes in dense deciduous trees or pure coniferous forests with brush or clearings nearby. Tends to avoid open country	High Potential: Known to occur in the neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest and/or ruderal grassland.
<u>Falco mexicanus</u> Prairie Falcon	None	CWL	Resident of open hills, plains, prairies, deserts. Typically found in fairly dry, open country, including grassland and desert. In winter can be found in farmland and around lakes and reservoirs, typically scarce around immediate coast.	Moderate Potential: <u>Has been rarely</u> observed within neighboring Coyote Hills Regional Park. <u>Project area may</u> provide suitable foraging habitat within ruderal grassland.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>Falco columbarius</u> <u>Merlin</u>	None	CWL	Habitat includes Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally breeds in semi-open terrain having trees for nest sites and open areas for hunting. May winter in more open areas, such as grasslands, coastal marshes.	Moderate Potential: <u>Has been observed</u> within neighboring <u>Coyote Hills Regional</u> Park. Project area may provide suitable foraging habitat within ruderal grassland.
<u>Pandion haliatus</u> <u>Osprey</u>	None	CWL	Rivers, lakes, coast. Found near water, either fresh or salt, where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around large lakes, reservoirs, rivers. Migrating Ospreys are sometimes seen far from water, even over the desert.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within freshwater/saline seasonal wetlands or wetland mitigation area to the south of the site along Line P.
<u>Asio otus</u> Long Eared Owl	None	<u>CSC</u>	Woodlands, conifer groves. Favored habitat includes dense trees for nesting and roosting, open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or deciduous trees in prairie country, streamside groves in desert. Generally avoids unbroken forest.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project <u>Area.</u>
<u>Dendroica petechia</u> <u>brewstri</u> <u>Yellow warbler</u>	None	<u>CSC, BCC</u>	Bushes, swamp edges, streams, gardens. In west, restricted to streamside thickets.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>Eremophila alpestris</u> actia California horned lark	None	CWL	Prairies, fields, airports, shores, tundra. Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of situations that are sufficiently open: short-grass prairies, extensive lawns (as on airports or golf courses), plowed fields, stubble fields, beaches, or lake flats.	High Potential: migrant bird that has been observed within neighboring Coyote Hills Regional Park. Suitable foraging habitat may be present within the ruderal grasslands, or agricultural fields of the Project area.
Empidonax traillii extimus Southwestern Willow Fly Catcher	<u>Federally</u> <u>Endangered</u> <u>State</u> <u>Endangered</u>		Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes (especially in southern part of range).	Moderate Potential: <u>species is a rare migrant</u> <u>but has been observed</u> <u>in neighboring Coyote</u> <u>Hills Regional Park.</u> <u>Project area may</u> <u>provide suitable habitat</u> <u>within the willow</u> <u>thickets / mixed</u> <u>riparian forest along</u> <u>Patterson Slough.</u>
Dendrocygna bicolor Fulvous Whistling Duck	None	<u>CSC</u>	Usually found in flocks; prefers marshes, marshy ponds, and flooded rice fields. Juvenile has contrasting dark wings and light belly. Vocal; frequently gives descending whistled calls with a stuttered beginning. Males sound wheezier, females more nasal and squeaky.	Low Potential: Individual observed west of the Project area within coyote hills regional park in March of 1970. Project area likely does not support suitable habitat for this species.
<u>Aythya Ameticana</u> <u>Redhead</u>	None	<u>CSC</u>	Gathers by the thousands on lakes or bays in the winter. Dives to reach submerged aquatic vegetation. Nests on marshy freshwater ponds and lakes. Slightly smaller than a Mallard with rounded, puffy head. Males have reddish-brown head, straw-yellow eye, and gray body. Females are plain brown overall; a lighter blonde color than scaup and Ring-necked Duck.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park in December of 2018, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Branta bernicla Brant	None	<u>CSC</u>	Small coastal goose that winters in saltmarshes, rocky coastlines, sheltered bays, and beaches. Black neck and breast, lighter sides and brownish back. White necklace and short black bill. Breeds in the Arctic tundra. Typically uncommon to rare inland. Almost always seen in flocks.	Moderate Potential: Individuals observed west of the Project area in Coyote Hills Regional Park in August of 2011. Suitable habitat may be present in the saltmarsh north of Tuibun trail.
<u>Bucephala islandica</u> <u>Barrow's Goldeneye</u>	None	<u>CSC</u>	Striking diving duck of coastal harbors, mountain lakes, and large rivers. Males are black-and-white with a white crescent in front of the eye. Females are gray with brown head and orangey bill.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park in January of 2019 and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.
<u>Chaetura vauxi</u> <u>Vaux's Swift</u>	None	CSC	Found in a variety of habitats, roosts in groups inside hollowed out trees, mixed forests, chimneys and other vertical openings. All-dark swift, often with slightly paler throat. Body is cigar shaped; flies with stiff, quick wing beats, often in small flocks. Western counterpart to Chimney Swift; essentially no range overlap during breeding season, but extensive overlap during migration through Central America.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park in September of 2018, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Mixed riparian forest of Patterson slough may provide suitable roosting habitat.
<u>Calypte costae</u> <u>Costa's</u> <u>Hummingbird</u>	None	BCC	Small hummingbird of desert habitats in Southwest U.S. and western Mexico. Compact and short-tailed with a slightly drooping bill. Male has a brilliant purple crown and throat that extends down to a point on each side; the purple coloration can appear black in poor lighting. Females are plainer with greenish back and dingy grayish under parts.	Low Potential: Individual observed west of the Project area within coyote hills regional park in September of 2008. Project area does not contain suitable shrub/desert habitat for nesting.

Scientific Name	Federal /	Other		Potential for
Common Name	State Status	Status	Habitat Association	Occurrence in Project area
Selasphorus rufus Rufous Hummingbird	None	BCC	Found in a variety of woodland habitats; more common in migration in suburbs, meadows, and other brushier areas. Feeds on nectar and tiny insects. Adult males are almost entirely orange with bright white chest and some green on the back. Throat is iridescent, and depending on the light, can look anywhere from red to orange to yellow to lime green.	High Potential: Individual observed west of the project area north of Patterson ranch road and Tuibun Trail in May of 2017. Additionally observed west of the Project area within Coyote Hills Regional Park as recent as September of 2017. Oak Savannah within Project area may provide suitable habitat.
<u>Antigone canadensis</u> <u>Sandhill Crane</u>	None	CSC	Often in large flocks at migration and wintering concentration points. Favors marshes and agricultural fields where they eat primarily grains. Large, long- legged bird shaped much like a heron. Gray body, sometimes with intense rusty staining. Adults have red crown.	Moderate Potential: Individual observed west of the Project area within coyote hills regional park as recently as October of 2017. Ruderal grassland within the Project area may provide suitable habitat
<u>Numenius</u> <u>americanus</u> <u>Long-Billed Curlew</u>	None	<u>CWL, BCC</u>	Found on beaches and open fields, solo or in flocks. Huge shorebird with incredibly long, downturned bill used to probe into mud and snag invertebrates. Buffy overall with brighter cinnamon wings. Exceptional bill length and shape rules out other large shorebirds.	High Potential: Individuals observed within the Southern Wetlands Natural Unit of the Project area within the Wetland Mitigation Area in January of 2017. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Ruderal grassland fields of Project area may provide suitable foraging habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<i>Larus californicus</i> <u>California Gull</u>	None	CWL	Frequents open habitats, including parking lots, beaches, inland lakes, and open ocean. Scavenges opportunistically for scraps of food. Breeds inland on islands in lakes or rivers.	High Potential: Observed within the project area north of Patterson ranch road and Tuibun Trail in March of 2019 and additionally observed west of the Project area within Coyote Hills Regional Park as recent as March of 2019.
Hydroprogne caspia Caspian Tern	None	BCC	Feeds by cruising over lakes, rivers, estuaries, and reservoirs looking for fish, then plunging to catch them. Smooth wingbeats, more gull-like than choppy flight of small-bodied terns. Very vocal, giving loud raucous screams. Largest tern in the world. Thick, bright-red bill is distinctive. Note solid black cap in summer, which turns to black streaks in winter.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not suitable shoreline habitat for foraging.
<u>Thalasseus elegans</u> <u>Elegant Tern</u>	None	CWL	Long-billed tern of the Pacific coast, from the U.S. to Chile. Strictly coastal; commonly found on beaches and estuaries. Pale gray above with shaggy black cap in breeding plumage; nonbreeding birds develop white forehead. Best field mark is the slender orange bill with a slight droop.	Low Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as November 2015, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not contain suitable shoreline or large water body for foraging.

Scientific Name	Federal /	Other		Potential for
Common Name	State Status	Status	Habitat Association	Occurrence in Project area
Rynchops niger Black Skimmer	None	<u>CSC</u>	Found coastally, especially beaches and sandbars. Unusual tern-like bird with oversized bill—lower mandible is much longer than upper mandible. Feeds by flying close to surface of water and dipping its lower mandible into the water "skimming" for small fish.	Low Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as July 2016, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not contain suitable beach or sandbar habitat.
<u>Gavia immer</u> Common Loon	None	CSC	Large-bodied diving water bird, breeds on floating mats of vegetation on lakes and ponds in the boreal forest. In winter, mostly found on bays and open ocean, singly or in loose flocks. Breeding adults have gorgeous black- and-white patterning. During the winter, plain gray above and white below. Note heavy bill held straight. Dives to catch fish in deep, clear water.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as October of 2018. East of the Project area within the Ardenwood historic farm and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Individuals may be seen flying over the Project area, however Project area does not provide suitable habitat.
Phalacrocorax auritus Double-crested Cormorant	None	CWL	Can be in large flocks or solo. Most widespread cormorant across U.S. and Canada; also most likely to be seen inland. Dark body with orange bare skin at the base of the bill. Breeding adults are all black. Immatures and nonbreeders have paler breast. Dives underwater to catch fish. Swims like a duck in between dives.	High Potential: Individuals observed within the Southern Wetlands Natural Unit of the Project area in January of 2019. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Pelecanus erythrorhynchos American White Pelican	None	CSC	Typically breed on islands in shallow wetlands in the interior of the continent. They spend winters mainly on coastal waters, bays, and estuaries, or a little distance inland.	High Potential: Individuals observed within the Project area south of Patterson Slough in September of 2018. Additionally, individuals observed along the Tuibun trail at the western edge of the Project area in March of 2019.
<u>Pelecanus</u> <u>occidentalis</u> <u>Brown Pelican</u>	None	CFP	Large and conspicuous, gray-brown bird of saltwater habitats. Strictly coastal; rarely seen on inland lakes. Very long bill with pouch for scooping up fish. Forages mainly by diving on fish from above	Moderate Potential: Individuals observed within the southwestern portion of the Project area within the Wetland Mitigation Area in September of 2015 Individuals observed west of the project area in Coyote Hills Regional Park, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not provide suitable marsh habitat for foraging, may be seen flying overhead.
<u>Plegadis chihi</u> <u>White-faced Ibis</u>	None	CWL	Found mainly in shallow wetlands of the western U.S Long decurved bill. Dark overall with iridescent green and reddish tones on adults. Broad white border to reddish face and red eyes.	High Potential: Individuals observed within the Southern Wetlands Natural Unit portion of the Project area in January of 2017. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>Haliaeetus</u> <u>leucocephalus</u> Bald Eagle	California Endangered <u>Federally</u> Delisted	<u>CFP, BCC</u>	Scavenges and hunts near bodies of water. Adults have blackish-brown body with white head and tail.	Low Potential: Individuals observed west of the project area along Tuibun trail in December of 2016 Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not contain suitable water bodies for foraging, individuals may be seen flying over Project area.
<u>Buteo swainsoni</u> <u>Swainson's Hawk</u>	<u>State</u> <u>Threatened</u>	BCC	Found in prairies and agricultural regions of western U.S. and Canada in warm months. Winters in South America and along Pacific coast of Central America. Extremely rare in U.S. in winter. Varies in color from rather pale with white belly to completely brown. Light morph is more common with brown breast band contrasting with white throat and belly.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as November of 2012, east of the Project area within the Ardenwood historic farm and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Ruderal grassland within Project area may provide suitable foraging habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Contopus cooperi Olive-sided Flycatcher	None	<u>CSC, BCC</u>	Feeds on insects. Breeds in clearings and bogs in boreal or mountainous forests, but can be found in migration in open habitats with a mixture of woods and clearings. From the front, look for dark sides creating a vest, with a bright white stripe from throat to belly. White patches on the sides of rump are sometimes visible from behind.	High Potential: Individuals observed just south of Patterson Slough in June of 2016. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm (May 2018), and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.
<u>Empidonax traillii</u> <u>Willow Flycatcher</u>	<u>State</u> <u>Endangered</u>	BCC	Western population prefers understory in riparian woods. Prefers shrubby open areas, especially around marshes. Wings dark with distinct white wingbars (brownish in Western population).	Moderate Potential: Individuals observed in southern portion of project area within the Wetlands Mitigation Area in September of 2015. Suitable habitat may be present within Patterson Slough. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm (9/18), and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.
<u>Spinus lawrencei</u> Lawrence's Goldfinch	None	BCC	Found in open grassy woodland. Uncommon, but sometimes travels in large flocks, especially in fall and winter. Highly erratic, moves around a lot from year-to-year. Feeds on seeds. Unique among goldfinches because of its mostly gray body. Male has black forehead and throat, yellow breast, and complex black and yellow pattern on wings.	Low Potential: Individual was observed in march of 2008 to the west of the project area within Coyote Hills Regional Park. Oak Savannah / ruderal grasslands of project area may provide suitable foraging habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Ammondramus savannarum Grasshopper Sparrow	None	<u>CSC</u>	Small, short-tailed, flat-headed sparrow found in weedy grasslands. Warm buffy coloration with clean unstreaked breast. Thin white eyering and yellow patch above eye. Back and wings are patterned with gray and rufous. Typically not in flocks.	Moderate Potential: Individual observed west of the Project area within Coyote Hills Regional Park in September of 2018. Suitable foraging habitat may exist within ruderal grasslands of Project Area.
MAMMALS				
<u>Sorex vagrans</u> <u>halicoetes</u> <u>Salt Marsh</u> <u>Wandering Shrew</u>	None	<u>CSC</u>	Resident of high marshland (2-3 MASL) of the south San Francisco Bay that contains scattered driftwood.	No Potential: Suitable habitat is present in the salt marshes surrounding the Project area. Poor habitat suitability within the Project area, species documented less than 2 miles from Project area.
<u>Reithrodontomys</u> <u>raviventris</u> <u>Salt Marsh Harvest</u> <u>Mouse</u>	Federally Endangered State Endangered	CFP	Saline wetlands of the San Francisco Bay and its tributaries; associated with pickleweed	Low Potential: suitable marsh habitat (pickleweed) does not occur within the Project area/Park Expansion area. The species has been documented to occur in the saline seasonal wetlands north of Patterson ranch road, as well as to the west and south of the Project Area.
<u>Antrozous pallidus</u> Pallid Bat	None	<u>CSC,</u> WBWG <u>High</u>	Roosts along rocky outcrops, cliffs, oak trees, and is also known to utilize buildings and the underside of bridges as roosting sites.	Moderate Potential: Suitable roosting habitat is present within the Project area within, Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.

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<u>Lasiurus blosevilli</u> <u>Western Red Bat</u>	None	<u>CSC,</u> <u>WBWG</u> High	Solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. Known to be very tolerant of human activity.	Moderate Potential: Suitable habitat within Project area is present along K/P line channels, in mixed riparian forest stands of Patterson Slough, and in farm buildings.
<u>Myotis thysanodes</u> Fringed Myotis	None	WBWG High Priority	Resident of various woodland habitats roosting in crevice or caves. Forages over open habitats and water bodies.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
<u>Myotis Volans</u> Long Legged Myotis	<u>None</u>	<u>WBWG</u> <u>High Priority</u>	Inhabitant of various woodland habitats surrounding bodies of water and open habitats. Roosts in crevices or caves.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
<u>Corynorhinus</u> <u>townsendii</u> <u>Townsend's Big-</u> <u>Eared Bat</u>	None	<u>CSC</u> , <u>WBWG</u> High Priority	Migratory bat associated with various habitats throughout California including desert scrub, mixed conifer forest, or pine forest habitat Specifically associated with limestone caves, mines, lava tubes, and buildings.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest

EAST BAY REGIONAL PARK DISTRICT COYOTE HILLS RESTORATION & PUBLIC ACCESS PROJECT COMMENTS AND RESPONSES FOR DRAFT EIR

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>FISH</u>				
<u>Oncorhynchus</u> <u>mykiss irideus</u> <u>Steelhead (Central</u> <u>Coast ESU)</u>	Federally Threatened NMFS		Very flexible life cycle patterns ranging from freshwater residents (non- migratory) to anadromous where adults travel upstream to the Russian river to spawn in cool, clear, well- oxygenated streams. Juveniles remain in these streams for at least 1 year before returning downstream through tributaries such as the Soquel Creek, or Pajaro River to the San Francisco and San Pablo Bay basins.	Low Potential: Unlikely to occur within the Project area, however the flood control channels of Alameda Creek Flood Control Channel are documented as being utilized by steelhead. These lands are outside of the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the channel will need to consider impacts to this protected species.
AMPHIBIANS				
Actinemys marmorata Western (Pacific) Pond Turtle	None	<u>CSC</u>	Resident of perennial ponds lakes, rivers and streams and even irrigation ditches. Requires suitable basking habitat (logs, floating vegetation) mud- banks, and a shelter that is submerged.	Moderate Potential: Pond turtles have been documented at the adjacent Coyote Hills Regional Park and at upstream (4.5 miles) sections of Alameda Creek. The species could potentially disperse into the Project area. Species has not been observed within the Project area; very limited egg laying sites are available.
<u>Rana draytonii</u> <u>California Red-</u> <u>Legged Frog</u>	Federally Threatened	CSC	Most common in lowlands or foothills. Found near ponds in humid forests, woodlands, grasslands, coastal shrub, and streamside with plant cover. Historically, found along the coast and Coast Ranges from Northern California to northern Baja California.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.

EAST BAY REGIONAL PARK DISTRICT COYOTE HILLS RESTORATION & PUBLIC ACCESS PROJECT COMMENTS AND RESPONSES FOR DRAFT EIR

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Ambystoma californiense California Tiger Salamander	Federally Threatened <u>State</u> Threatened	CWL	Resident of grasslands and low foothills with pools or ponds that are necessary for breeding.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
INVERTEBRATES				
Danaus plexippus Monarch Butterfly	<u>Federal</u> <u>Candidate</u>	Roosts Protected by CDFW	Winter nesting habitat ranges from Mendocino to Baja California, Mexico along the California coast. Monarchs typically nest in wind protected groves (Eucalyptus, Monterey Pine, and Monterey Cypress) in locations with close proximity to nectar and water sources.	Moderate Potential: Documented roosting sites occur within 0.5 miles of the Project area and individuals may be observed during periods of the year foraging within the Project area. Mixed Riparian forest likely does not support a suitable habitat for roosting/overwintering -
<u>Lepidurus packardi</u> <u>Vernal Pool Tadpole</u> <u>Shrimp</u>	Federally Endangered		Reside in a wide variety of seasonal pools throughout the grasslands of the central valley. The water can be clear to murky and between 50-84 degrees Fahrenheit.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys
<u>Branchinecta lynchi</u> <u>Vernal Pool Fairy</u> <u>Shrimp</u>	<u>Federally</u> <u>Threatened</u>		Reside in a wide variety of seasonal pools including vernal pools, alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops within grassland habitat.	Low Potential: <u>Marginal habitat is</u> present, however, the <u>species was not</u> observed in the Project <u>area during previous</u> protocol biological <u>surveys</u>

FT Federal Threatened ED Federal Delisted FC Federal Candidate FBGE Federal Bald Eagle and Golden Eagle Protection Act BCC USFWS Birds of Conservation Concern MMPA Species protected under the Marine Mammal Protection Act NMFS Species under the Jurisdiction of the National Marine Fisheries Service WBWG Western Bat Working Group (High or Medium) Priority Species State State CE California Endangered CT California Species of Special Concern CWL California Species of Special Concern CWL California Fully Protected CDE California Fully Protected CDE California Candidate Endangered Species Species Evaluations: No Potential: Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate elevation, hydrology, plant community, site history, disturbance regime). Low Potential: Few of the habitat components meeting the species requirement are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The Species is not likely to be found on the site. Moderate Potential: Some of the habitat components meeting the species requirements are present, and/or only some of the habitat components meeting the spe		Federal			
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or adjacent to the site is highly suitable. The species has a high probability of being found on the site.					
Observed: Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.					

Key to Sensitive Wildlife Species Status Codes

The description of Tricolored Blackbird, on page 93 of the Draft EIR, is edited as follows:

Tricolored Blackbird (*Agelaius tricolor*) – <u>California Threatened</u>, USFWS Bird of Conservation Concern, CDFW Species of Special Concern

This update does not alter any Draft EIR conclusions regarding biological impacts and needed mitigation measures, or result in any significant new impacts, or a substantial increase in the severity of an impact identified in the Draft EIR. Therefore, recirculation of the Draft EIR is not required.

Response GGAS-12

The comment encourages the Park District to limit activities and measure impacts before opening trails. The principal area of high value habitat is Patterson Slough, which is also considered to be a Sensitive Natural Community, and which along with the surrounding area, would be restored as a willow sausal and mixed riparian forest under the Proposed Project, and designated as a Special Protection Feature, with public access restrictions (LUPA, p. 79).

The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Mitigation measures identified in the Draft EIR would reduce all impacts of the Project on biological resources to a less-than-significant level. Additional analysis is not required.

See also Response GGAS-5.

Response GGAS-13

We have added GGAS to our Project mailing list.

Response GGAS-14

See Response GGAS-11.

Response GGAS-15

Thank you for the clarification. These species have also been added to revised Draft EIR Table -4.1-1, in addition to other suggested corrections (See Response GGAS-14). Many of the e-bird checklist Special Status species were actually observed within emergent marsh and ponded areas at the adjacent Coyote Hills Regional Park. The addition of these species and their edits regarding their special status do not change the Draft EIR conclusions regarding biological impacts on Special Status Species or require changes to recommended mitigation measures.

Response GGAS-16

See Response GGAS-15.

Response GGAS-17

See Response GGAS-15.

Response GGAS-18

See Response GGAS-15.

Response GGAS-19

See Response GGAS-15.

Citizens Committee to Complete the Refuge (C. High), et. al.







Ms. Karla Cuero East Bay Regional Park District Acquisition, Stewardship and Development Division 2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605

22 April 2019

Re: Draft Environmental Impact Report (DEIR) and Land Use Plan Amendment (LUPA) for the Coyote Hills Restoration and Public Access Project

Dear Ms. Cuero,

The Citizens Committee to Complete the Refuge, the Friends of Coyote Hills and the Ohlone Audubon Society thank you for the opportunity to provide comments regarding the draft environmental impact report (DEIR) and Land Use Plan Amendment (LUPA) for the Coyote Hills Restoration and Public Access Project that specifically address actions proposed 1 for the recently acquired 306-acres once part of Patterson Ranch.

The Citizens Committee to Complete the Refuge has an ongoing history of interest in wetlands protection, wetlands restoration, and wetlands acquisition. The Committee was originally formed in 1965. Our senior members were part of a group of citizens who became alarmed at the degradation of the Bay and its wetlands. We joined together, and with the support of Congressman Don Edwards, requested that Congress establish a wildlife refuge. The process took seven long years and in 1972 legislation was passed to form the San Francisco Bay National Wildlife Refuge, the wildlife refuge which now appropriately bears his name. We turned to Mr. Edwards again, and in 1988 (the first year he submitted it) his legislation to double the size of the Refuge was signed into law.

We have taken an active interest in Clean Water Act (CWA), California Environmental Quality Act (CEQA), and Endangered Species Act (ESA) regulations, policies, implementation, and enforcement. We have established a record of providing information regarding possible CWA and ESA violations to the Corps, EPA, and FWS. We regularly respond to Corps public notices, and inform the public of important local CWA and ESA issues. We review and comment on CEQA documents. We also respond to ESA comment periods including five-year reviews, proposed listings, and recovery plans. All of these actions demonstrate our ongoing commitment to wetland and plant and wildlife issues, and towards protecting the public interest in wetlands, in Section 404 and 401 of the CWA, CEQA, and the ESA. Protection of the lands adjacent to Coyote Hills Regional Park has been a focus of our organization and the lands of Patterson Ranch were included in the 1990 identification of Lands for Potential Additions to the San Francisco Bay National Wildlife Refuge.

The Friends of Coyote Hills is an environmentally focused group serving the Tri-Cities area. We are dedicated to the conservation and preservation of open space and the plant and wildlife habitats it supports, and to engaging public involvement with local and regional environmental issues through community outreach, education, collaborative efforts, and advocacy.

Since 1992, local citizens have opposed housing development in front of Coyote Hills Regional Park. In 2000, Friends of Coyote Hills was formed when housing development was again proposed in front of the park. We worked on Measure K, the Protect Coyote Hills Natural Area Initiative, which was on the Fremont ballot in November 2006. Though the initiative failed, the lands west of Ardenwood Boulevard were ultimately protected from development and 306-acres were eventually turned over to the East Bay Regional Park District.

The Ohlone Audubon Society serves southern and eastern Alameda County and provides conservation and environmental advocacy towards the protection and persistence of valuable habitat for birds and other native species throughout the County. Many of our members actively engage in citizen science projects that increase scientific knowledge of local bird populations. We comment on development and other projects that may adversely impact habitats vital to avian species. In addition we provide educational programs including bird watching field trips led by knowledgeable leaders and monthly membership meetings featuring well-known scientists and journalists.

Language included in the LUPA acknowledges the ecological significance of the remnant historic willow grove within the Patterson Slough Natural Unit, as well as the importance of protecting, preserving and restoring this area. Unfortunately, the actions proposed within the LUPA and DEIR do not provide confidence that that will actually occur. As detailed by our consultant, Scott Cashen, the DEIR is fundamentally flawed in its deferral of details relating to proposed restoration activities. Second, it is impossible to determine impacts to biological resources will be less than significant as baseline conditions have not been adequately described and the DEIR fails to analyze or discuss the adverse impacts of human disturbance, trails and picnic areas that were raised in our scoping letter. Last, the proposed public access features (which are described with much more detail) have the potential to result in significant adverse impacts to the natural environment at the project level and cumulatively when reviewed against the many projects in the area that have reduced habitats that sustain natural resources. This is in stark contrast to stated intent of protecting and preserving a regionally significant habitat – the willow sausal, historically known as "The Willows."¹

An opportunity not to be squandered

For decades, spurred by the loss of habitat diversity along the edges of the Bay, and by the release of scientific-peer reviewed documents such as the Baylands Ecosystem Habitat Goals Report² that identified important opportunities for protection and restoration, local environmental groups have fought to protect the lands of Patterson Ranch. The Goals Project described the area thusly, "The diked wetlands east of Coyote Hills [partially within the park boundaries and the Patterson Ranch Property] support the *largest remaining willow groves in the baylands ecosystem*." [emphasis added]

Willow sausals or willow thickets are described by Stanford et al³: "Willow thickets (or willow swamps) are palustrine forested wetlands that occur in large stands, rather than as riparian vegetation along a creek and are associated with areas of emergent groundwater (Cowardin et al. 1979, Goals Project 1999, Collins and Grossinger 2004, Beller et al. 2011). They were often referred to as *sausals* in early Spanish documents and are *largely absent from the landscape today* (Collins and Grossinger 2004)."[emphasis added]

The remaining remnant was once "a 400 acre willow thicket east of Coyote Hills and just south of the present-day Flood Control Channel..." and was known as a "hotspot for local biodiversity"⁴ [emphasis added]:

"Ornithological records reflect the diversity of habitats available in and around this small wetland. On August 10, 1919, pioneer California biologist Joseph Grinnell spent an hour recording bird species in the Willows, which he described as "a large tract of dense willow, alder and sycamore, with big live oaks adjacent" (Grinnell 1919). He recorded 18 species, including species associated with oak habitats (Hutton's vireo (*Vireo huttoni*), oak titmouse (*Baeolophus inornatus*)), brushy and marshy habitats with dense cover (song sparrow (*Melospiza melodia*),

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(Cont.)

¹ Stanford B, RM Grossinger, J Beagle, RA Askevold, RA Leidy, EE Beller, M Salomon, C Striplen, AA Whipple. 2013. Alameda Creek Watershed Historical Ecology Study. SFEI Publication #679, San Francisco Estuary Institute, Richmond, CA.

² Goals Project. 1999. Baylands Ecosystem Habitat Goals. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. U.S. Environmental Protection Agency, San Francisco, Calif./S.F. Bay Regional Water Quality Control Board, Oakland, Calif. [Updated Goals Project. 2015. *The Baylands and Climate Change: What We Can Do. Baylands Ecosystem Habitat Goals Science Update 2015* prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. California State Coastal Conservancy, Oakland, CA.]

Bewick's wren (Thryomanes bewickii), spotted towhee (Pipilo maculatus), Wilson's warbler (Cardellina pusilla)) and open and mixed habitats (red-shafted flicker (Colaptes auratus cafer)) (Bousman 2007, American Ornithologists' Union 2011). In addition to its significance as a hotspot for local biodiversity, the Willows was an important local cultural landmark." Fragments of this historic willow grove exist at the eastern boundary of Coyote Hills Regional Park and on the Patterson Ranch site. The current alignment of Patterson Slough represents the approximate northeastern boundary of the historic willow grove. Historically the willow grove tapered to the east all the way to Ardenwood Historic Farm. Willow grove habitat supports a tremendous diversity of wildlife species. The 2005 Coyote Hills Land Use Plan states the willow habitat within the Park boundaries supplies an abundant supply of insects that provide a food base nearly 100 species of wintering, migratory and breeding birds. The 2005 Coyote Hills Regional Park LUP emphasizes the biological significance of the willow grove (sausal) habitat: More than 135 bird species depend on riparian areas during their lifetime – more than any other habitat type in California. The abundant supply of insects provides a food base for nearly 100 species of wintering, migratory and breeding birds that use this area of the park.

During the winter season birds of every shape and size inhabit the willows. This area is important to such wintering species as the black-crowned night heron, fox sparrow, hermit thrush, ruby-crowned kinglet, yellow-rumped warbler, and is one of the few known sites in Alameda County for wintering long-eared owls.

During the spring migration the willows support an amazing array of neotropical songbirds including: Pacificslope flycatcher, Swainson's thrush, yellow warbler, yellow-breasted chat, and willow flycatcher (state endangered species). Some of the more notable, common breeding birds found in the willows include: common yellowthroat, Cooper's hawk, and white-tailed kite, tree swallow, Bewick's wren, and song sparrow. Along the pickleweed dominated wetland edge that borders this willow habitat the California black rail, a state listed species, has been recorded. [emphasis added]

...The area is also an important site for the park's only native water breeding amphibian, the Pacific chorus frog. Its high abundance provides an important base for the food pyramid supporting such predators as the Western yellow-bellied racer, California redsided garter snake, and raccoon. Lastly, the Willow Woodland is an important habitat for isolated populations of black tailed deer and brush rabbit.

The Goals Project⁵ recommends protection and restoration of the willow grove habitat.

The passages above identify the ecological importance of the willow grove habitat that exists between Patterson Slough and the area of the north and east of the existing kiosk as a habitat that is now unique within the South Bay. It is a biodiversity hotspot and an area that must be protected and restored.

We have taken the time to reiterate information contained in the 2005 LUP, the LUPA, the Goals Project and other publications to emphasize the unique opportunity that has been placed into the hands of the East Bay Regional Park District. It is an opportunity that must not be squandered.

We are supportive of the language of the LUPA that states "Habitat restoration and enhancement actions would focus on protecting, expanding and enhancing the unique and historical willow sausal..." as well as "creating ecologically complimentary seasonal wetlands/oak savanna and native grassland areas for wildlife habitat..." This habitat is referred to by Josh Collins of the San Francisco Estuary Institute⁶ as being "the rarest of all mosaics left in the Bay Area." We do however, request clarification that our assumption that "…livestock grazing in the Patterson Slough Natural Unit" pertains to grazing strictly for the purposes of vegetation management.

Inadequacy of the proposed restoration plan

The word "restoration" is in the title of the LUPA and DEIR, but insufficient information regarding how this would be accomplished, when it would be accomplished and why it is likely to be successful is provided for public review and comment. We appreciate the commitment to provide habitat restoration, but the DEIR should have provided sufficient information to enable the public to provide substantive review and comments.

7.1 Habitat Restoration and Enhancement (LUPA page 84, DEIR page 47-48)

While we are pleased that 254 acres of the 306 acres is proposed as Natural Units, we find the LUPA and DEIR lacking a detailed restoration plan. Indeed, the LUPA states:

"Soil and hydrologic fieldwork could be completed along with pilot or test plantings to develop a final Restoration Planting Plan, establishing irrigation and post-planting vegetation and invasive species management concepts and procedures, prior to full-scale implementation over a three- to five-year period. Public access facilities and Trail Plan Implementation could ideally occur during the Year One pilot or planting period, if funding and delivery capacity allows."

Neither the LUPA nor the DEIR include even a draft restoration plan upon which to base the environmental review. The LUPA includes broad concepts about afforestation and restoration. It outlines general locations where these activities are intended to occur but lacks the baseline information to assure these broad land coverage targets are feasible (DEIR p. 47). The documents do not address the genetics of the restoration/afforestation. Does EBRPD intend to use only locally collected seeds, cuttings, poles to implement the restoration? What is the proposed plant palette? Will any previously extirpated plant species be reintroduced to enhance biodiversity at Coyote Hills? How will the import of plant pathogens be minimized from entering these habitats and Coyote Hills? How will plantings be irrigated and would new water lines be needed, and if so where, to provide for irrigation systems. What level of commitment is EBRPD making toward restoration? At a minimum, a draft restoration plan is needed for the public to evaluate the potential benefits and impacts of these activities. A habitat enhancement or restoration plan should address:

- 1. Background and Baseline Data
 - a. Soil Conditions
 - b. Hydrologic Conditions
 - c. Existing Plant Communities and Wildlife Using these Habitats
 - d. Existing Plant Species
 - e. Ecological Functions provided by each Habitat
- 2. Enhancement/Restoration Goals which may include:
 - a. Acreage Targets
 - b. Desired Genetics Watershed Specific Plant Material
 - c. Desired Ecological Functions
 - d. Any Specific Plant (possibly previously extripated species) or Wildlife Species Targeted for Reintroduction or Improved Abundance
 - e. Quantity of Carbon Sequestration per Time Period
- 3. Implementation Plan

Cont.)

⁶ Drew, Jacob. March 2002. *Residents Rally for "Rarest of Mosaics"* Terrain Magazine. https://ecologycenter.org/terrainmagazine/summer-2002/residents-rally-for-rarest-of-mosaics/

	а.		eparation		
		i. Weed Seed Bank Management			
			Protection of Unique Plant Populations		
			Grading		
			Soil Preparation		
		۷.	Plant Palette by Habitat		
		vi.	Guidelines to Minimize the Import of Plant Pathogens from:		
			1. Construction Vehicles and Workers (Contractors, EBRPD Staff, Volunteers)		
			2. Soil Amendments		
			3. Erosion Control Materials		
			4. Nursery Stock		
		vii.	Planting Methods		
			1. Direct Seeding		
			2. Direct Installation of Cuttings, Poles, Wattles		
			3. Contract Grown Container Stock		
			a. Approved Nurseries – Implementing Phytophthora Free Growing Practices		
			b. Lead Time		
		viii.	Irrigation	CCCR-	
			1. Where and When to Irrigate	5	
			2. Access to Water/Need for Water Lines/Use of Existing Wells	(Cont.)	
			3. How to Irrigate		
			a. Flood Irrigate from Winter Storm Flows		
			b. Truck/Hand Water		
			c. Irrigation Systems – Permanent or Temporary		
			d. Impact of Wildlife on Selected Irrigation System Types		
		ix.	Timing		
4.	Mainte	enance a	nd Monitoring – Is EBRPD reaching its goals?		
	а.	Mainte	nance – How will the restoration sites be maintained?		
		i.	Types of Maintenance Activities and Timing		
		ii.	Staffing		
		iii.	Budget		
	b.	Monito	pring		
		i.	Qualitative or Quantitative Monitoring		
		ii.	Success Criteria		
		iii.	Methodology		
		iv.	Frequency and Timing		
		v.	Reporting		
5. Adaptive Management Strategies					
a. Types of Actions that May be Undertaken					
	b.	Trigger	s for Actions		

Introduction of Plant Pathogens

The DEIR does not address the potential for plant pathogens to enter the site during construction of public access features and restoration activities. It is well known that *Phytophthora ramorum*, the plant pathogen causing Sudden Oak Death (SOD), has impacted hundreds of thousands of acres of oak forests in 15 counties including Alameda. A quick check of the SOD map indicates that no testing by UC Berkeley has occurred within Coyote Hills (sodmap2018.kmz) and it may still be considered a site uninfected by *Phytophthora ramorum*. New research indicates that many other *Phytophthora* species have been outplanted into wildlands through mitigation and restoration efforts in the Bay

Area^{7,8,9}. *P. tentaculata* is having a chilling effect on California Mugwort (*Artemisia douglasiana*), California Sagebrush (*Artemisia californica*), Sticky Monkeyflower (*Diplacus aurantiacus*), Coffeeberry (*Frangula californica*) and Toyon (*Heteromeles arbutifolia*). All of these species are present at Coyote Hills and could be negatively impacted by the introduction of *P. tentaculata* or other Phytophthora species during construction and restoration activities. How will EBRPD minimize the risk of introducing plant pathogens to Coyote Hills¹⁰?

CCCR-6 (Cont.)

The Working Group for Phytophthoras in Native Habitats published draft "Guidance for environmental regulators to reduce the risk of Phytophthoras and other plant pathogen introductions to restoration sites" in September 2017. Native plant restoration nurseries around the greater Bay Area are participating in pilot "Accreditation to Improve Restoration and Native Plant Nursery Stock Cleanliness" (AIR) program, sponsored by the Pacific Southwest Research Station of the U.S. Forest Service¹¹. Plants produced under the Best Management Practices (BMPs) of this program provide disease-free stock for restoration projects being carried out by clients such as the Santa Clara Valley Water District, the U.S. Army Corps of Engineers and the San Francisco Public Utilities Commission. Will EBRPD require that any container stock used in the restoration or in and around the public access facilities be grown under these guidelines?

Photos in the LUPA appear to indicate that container tree stock has been installed in the Southern Wetlands Natural Unit by ACFCWCD (LUPA p. 84 and 105). Is ACFCWCD implementing measures to reduce the potential of introducing plant pathogens to Coyote Hills? How is EBRPD coordinating with ACFCWCD? Is EBRPD conducting plan reviews of the ACFCWCD projects on lands to be added to the park and eventually managed by EBRPD staff?¹²

Substantive concerns regarding the quality of proposed restoration for wildlife:

The LUPA states the "specific project goals of the project" include "**Restoration Goals**: Restoration and enhancement of riparian, wetland and grassland habitats. Design habitats to increase plant and animal species diversity and abundance." However, the plan fails to provide any metrics by which success of the restoration would be measured. If sausal habitat is acknowledged to be unique and regionally and ecologically significant, why aren't objectives pertinent to wildlife use of that habitat included? Under "wildlife objectives" the LUPA suggests bird roosting and foraging area objectives should be considered, as well as consideration of measures to protect ground nesting birds and establishment of a program to control feral animals.

Objectives that consider improvement of nesting and foraging areas for special status species is restricted to just three species – the White-tailed Kite, the Western Burrowing Owl and the Northern Harrier. The 2005 LUP mentions just the salt marsh harvest mouse and the Western Burrowing Owl. Why aren't additional metrics that provide for increased use and diversity of bird species utilizing this habitat during the winter months, or for increased use and diversity of neotropical song birds utilizing the sausal habitat during the spring months included? Does the Southern Willow Flycatcher currently utilize the willow grove habitat? If so, why wouldn't one objective be to improve habitat for this state and federally listed species? The Tricolored Blackbird became a state listed species in April 2018 and the LUPA should consider improving nesting and foraging habitat for this species as well. Why wouldn't an increased use of the sausal habitat by amphibian and mammal species be included as an objective? Without including such metrics as objectives, it will be impossible for EBRPD to determine whether the restoration proposed provides useable habitat for wildlife.

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⁷ http://calag.ucanr.edu/archive/?article=ca.2018a0035

⁸ <u>http://www.suddenoakdeath.org/wp-content/uploads/2016/02/2.19.16</u> Associated-host-list-of-Phytophthora-tentaculata.pdf
⁹ <u>http://www.suddenoakdeath.org/wp-content/uploads/2015/02/P.tentaculata.Pest</u>.<u>Alert</u>.<u>022315.pdf</u>

¹⁰ http://phytosphere.com/soilphytophthora/Issues implications Phytophthora container stock.htm

¹¹ <u>http://www.suddenoakdeath.org/welcome-to-calphytos-org-phytophthoras-in-native-habitats/resources/</u>

¹² <u>http://www.suddenoakdeath.org/wp-content/uploads/2018/06/Phytosphere.GGNPC_.BMPS_.Trails.Construction.Soil_.Import.31Jan2018.pdf</u>

Table 1.1 Policy Framework of the LUPA, includes the following policy statement:

PRPT22: Areas with unique or fragile features will be designated as Special Protection Features to preserve and enhance them through specialized management. Special Protection Features may be closed seasonally or permanently to public access, if public access will endanger them. [emphasis added]

Endangerment of unique or fragile features has not been defined within the context of the LUPA. Does this mean only CCCRendangerment associated with physical disruption of the features, i.e. trampling of habitat, etc.? Or does this term 7 encompass disruption of ecosystem function for wildlife as well?

One of our substantive and pressing concerns are the impacts of human disturbance on the habitat value of the Patterson Slough Natural Unit. While we are certainly supportive of public access features and believe they provide important opportunities for interpretive education and for recreation, there are limitations on where these features should be located if ecological restoration is truly a goal of this LUPA. EBRPD has added language suggesting a berm might be constructed to screen the picnic area from Patterson Slough, that fencing will be installed to prevent ingress into the sausal restoration area, and that dogs would be restricted from the Patterson Slough Natural Unit. These are restrictions that can help limit the adverse impacts of human disturbance, but does not remove the substantive concerns regarding fragmentation of habitat, noise disturbance, human presence disturbance or the potential attraction of nuisance species and predators of migratory or nesting birds, etc.

Though we submitted comments regarding the scientifically documented adverse impacts of human disturbance on wildlife in our scoping comments, the DEIR focuses predominately on mitigation measures that address impacts arising from implementation of the project elements and not of the proposed project elements post-construction.

Scientific literature is rife with documentation of the adverse impacts of human disturbance on bird behavior, nesting, the survivorship of nestlings, etc. Piper and Catterall 2005¹³ conducted a study to assess whether picnic areas had impacts on birds in adjacent eucalypt forests in Australia. They concluded that "picnic areas exert strong localized edge effects on forest bird assemblages, and are likely to cause reduced reproductive success for small-bodied forest bird species which attempt to nest nearby." [emphasis added]

Our scoping letter included numerous scientific studies that demonstrate the adverse impacts of locating public access adjacent to areas of wildlife habitat. We recommended removal of trails that would completely encircle the sausal CCCRhabitat and Patterson Slough as well as the proposed spur trails that, even if fenced will fragment the habitat and will result in an undocumented level of human disturbance. The DEIR as documented by Scott Cashen, has not addressed these issues.

Miller, Knight and Miller 1998¹⁴ found that "trails affect the distribution and abundance as well as the reproductive success of bird species, suggesting the need for more insightful trail planning and management of recreationists in natural areas." Jordan 2000¹⁵ summarized studies of human disturbance on breeding birds:

"Several references document negative impacts on breeding bids of recreational trails as narrow as 1-3m wide in forest and grasslands (Miller et al. 1998, Hickman 1990), as well as by dirt roads and powerlines (Kroodsma 1982, Askins 1994). The negative impacts included decreased nesting near trails, altered bird species composition near

(Cont.)

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¹³ Piper, Scott D. and Carla P. Catterall. 2006. Impacts of picnic areas on bird assemblages and nest predation activity within Australian eucalypt forests. Landscape and Urban Planning 78: 251-262.

¹⁴ Miller, Scott G., Richard L. Knight, Clinton K. Miller. 1998. *Influence of Recreational Trails on Breeding Bird Communities*. Ecological Applications, 8: 162-169. doi:10.1890/1051-0761(1998)008[0162:IORTOB]2.0.CO;2

¹⁵ Jordan, M. (2000). Ecological impacts of recreational use of trails: a literature review. *The Nature Conservancy, New York*.

trails, and increased nests predation by cowbirds, skunks, raccoons and foxes using the clearings as corridors. These CCCReffects are possible even if the forest canopy is not opened by the trail (Hickman 1990). "

Fletcher, McKinney and Bock 1999¹⁶ reported, "Our study suggests both that riparian corridors are important areas for wintering raptors and that trails may displace raptor perch use away from riparian habitat."

Trulio and White ¹⁷ undertook an experimental approach to investigate wintering waterfowl responses to introduced trail use at foraging sites with and without recreational trails along the salt pond habitats of the San Francisco Bay. Waterfowl were exposed to trail use in the form of two researchers walking levees adjacent to ponded habitat, and the number of waterfowl by species were compared before and after experimental walks in 40-m bands starting at the levee and extending 200 m into the ponds. The researchers recorded distances to the nearest individuals, responses of focal animals, and numbers of recreational trail users. The most numerous species were Ruddy Duck (*Oxyura jamaicensis*), Northern Shoveler (*Anas clypeata*), and scaup spp. (*Aythya affinis and A. marila*). Recreational trail use rates at trail sites averaged 1 to 82 people/hr. The greatest difference in numbers of birds before vs. after experimental walks occurred in the two 40-m bands closest to the levee at non-trail sites. The relationship between the ratio of before to after-walk waterfowl numbers vs. date since the start of the winter season and the total number of birds vs. the number of recreational trail users did not indicate increasing tolerance to trail use for waterfowl overall. However, species varied in their tolerances. Distances (using the 95th percentile) that individual birds were recorded from researchers during experimental walks varied from approximately 170-200 m at both non-trail and trail sites. These study results have direct implication for the trails proposed around and into the mitigation ponds proposed by the Alameda County Public Works Flood Control Area (Landscape Unit #11).

These studies confirm the impacts of recreational trail use on bird behavior and breeding success. Other studies have indicated recreational trail use may alter species diversity and composition in areas adjacent to trails.

The LUPA indicates dogs would be restricted from the spur trail on the western side of Patterson Slough but is silent regarding whether there would be a similar restriction for the proposed spur trail on the eastern side of Patterson Slough, this trail appears to terminate right next to the proposed sausal restoration boundary. By surrounding the proposed Patterson Slough Natural Unit on three sides by multi-use or footpath trails, as well as introducing spur trails that will lead right up to or through the habitat to be restored, the proposed project will introduce levels of human and human associated disturbance that will significantly and adversely impact the wildlife value of habitat being "restored."

• Based upon this information we continue to urge EBRPD to implement an alternative that removes the Patterson Slough east and west spur trails.

We also urge EBRPD to remove the Wetlands View Spur. As it is, the area at the southern end where Alameda County Public Works is conducting its work will be completely surrounded by trails. The addition of the spur would fragment habitat and bring human disturbance even closer to birds and wildlife utilizing the areas of ponding, and we assume adjacent wetlands habitat. Another possible means of reducing adverse impacts to migratory waterbirds would be to restrict access on the Wetlands View Spur during the period of time when the area is occupied by migratory waterbirds.

The LUPA states (Page 102):

"The basins will be planted and seeded using a mix of native seasonal wetlands and emergent marsh

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¹⁶ Fletcher, Robert J. Jr., Shawn T. McKinney and Carl E. Bock. 1999. *Effects of recreational trails on wintering diurnal raptors along riparian corridors in a Colorado grassland*. J.Raptor Res. 33(3):233-239

¹⁷ A. Trulio, Lynne & R. White, Heather. (2017). Wintering Waterfowl Avoidance and Tolerance of Recreational Trail Use. Waterbirds. 40. 252-262. 10.1675/063.040.0306.

species, including species that are saline-alkali tolerant. <u>The created wetlands will provide mitigation</u> <u>credits for other ACFCWCD</u> flood control and channel maintenance projects and operations in Zone 5, including maintenance projects along Alameda Creek."

The DEIR does not relate ACFCWCD's mitigation goals or permit conditions for the Southern Wetlands Natural Unit and thus it is impossible to judge whether the introduction of trails would impact the mitigation goals and assignment of credits for this flood control improvement project. What are the permit conditions associated with this flood control project? How might the introduction of trails impact wildlife in this area? Of particular concern is the Tule Lookout Trail that bisects the flood control basins which could provide habitat for migratory waterfowl in the winter months.

Human disturbance research from trails on shorebirds, waterfowl and snowy plovers was undertaken in the Bay Area in association with the South Bay Salt Pond Restoration Project. It is assumed that the majority of birds using the flood control basins in the Southern Wetlands Natural Unit would be overwintering waterfowl. Key conclusions from these before and after trail studies¹⁸ on waterfowl indicated that trail use at new and existing sites reduced waterfowl numbers adjacent to trails, changed bird behavior and reduced the habitat area available to waterfowl compared to conditions before trail walkers entered the study sites. Researchers recommended that managers should place trails approximately 200 meters from wintering waterfowl habitat, concentrate trails in focused areas, eliminate low-use trails and plan for significant amounts of trail-free habitat areas for waterfowl. As currently planned the Southern Wetlands Natural Unit shows trail encircling the flood control basins (Tule Loop Trail) and extending in between the basins (Tule Lookout Trail) effectively covering this new habitat with human disturbance. The Ardenwood Creek Connector Trail creates the "loop" in the loop trail but further divides the area and also impacts the habitat of Ardenwood Creek (Line P). What are the mitigation goals and habitat goals for the flood control project and is the proposed trail layout in conflict with creating habitat for overwintering waterfowl?

Public access description provided in the LUPA beginning at page 13:

We strongly urge EBRPD to correct the mischaracterization of public access provided at Eden Landing Ecological Reserve (ELER) and the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge).

Regarding the ELER, the LUPA states:

Within the 6,400 acre ELER, public use is allowed on approximately 14 acres, with facilities including a 13,000 foot long section of the San Francisco Bay Trail, 13,000 feet of seasonally closed spur trails, a watercraft launch, benches, interpretive exhibits and a 24-vehicle trailhead parking area. Hunting is allowed ten days per year with a capacity of 100 hunters. This represents less than 0.3% of the Reserve that is available for outdoor recreation. Planning is currently underway for expansion of the Reserve for habitat restoration, flood risk management, and recreation, although the extent of additional recreation and public access facilities has not yet been determined.

Public access features have been an important objective of the restoration efforts on these lands. The Phase Two Final Environmental Impact Report for the ELER states:

CDFW is the owner of Eden Landing, and as an ecological reserve, the Eden Landing pond complex is governed by laws and directives that guide public use and recreation on State ecological reserves. The State's ecological reserve system was authorized by the California Legislature in 1968 *and is designed to conserve areas for the protection of rare plants, animals, and habitats, and to provide areas for education and scientific research*. The reserves also provide recreational opportunities for wildlife viewing, outdoor education, hunting, and fishing, subject to regulation. At ELER, bicycles and horseback riding are allowed only on designated trails. [emphasis added] CCCR-15 Phase 2 proposed public access actions at the ELER include a "through-trail from northern Eden Landing to the Southern CCCR Ponds...constructed on improved levees (elevation 12 feet, NAVD88). A footbridge would be constructed over the 15 connection to the J-ponds... In addition, the bridge over the ACFCC at the Alameda Creek Regional Trail would be included."

(Cont.)

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Regarding the Refuge, the LUPA states:

Within the 8,500-acre Don Edwards Refuge Headquarters (part of 30,000 acres in the entire SF Bay area), there are approximately ten miles of trails, a Visitor Center, parking area and site furnishings. This represents approximately 4 acres and also less than 0.05% of the Refuge where outdoor recreation is allowed. South Bay Restoration Project activities within the Refuge (in Alameda County) did not include any additional recreation or public access facilities.

While we cannot confirm the number of miles open to unrestricted public access strictly within Alameda County, the Refuge manages 40 miles of public access on its 70 miles of levees¹⁹. Over half of the levees within the Don Edwards San Francisco Bay National Wildlife Refuge therefore, are open to public access. Those trails include areas suitable to meet the requirements of the American Disabilities Act and provide interpretive signage, overlooks and benches and there is a second Visitor Center located in Alviso.

The Refuge Comprehensive Conservation Plan²⁰ states:

Lands within the Refuge System are acquired and managed under a variety of legislative acts and administrative orders and authorities. The official purpose or purposes for a refuge are specified in or derived from the law, proclamation, executive order, agreement, public land order, funding source, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit. The purpose of a refuge is defined when it is established or when new land is added to an existing refuge. When an addition to a refuge is acquired under an authority different from the authority used to establish the original refuge, the addition takes on the purposes of the original refuge, but the original refuge does not take on the purposes of the addition. Refuge managers must consider all of the purposes. However, purposes that deal with the conservation, management, and restoration of fish, wildlife, and plants and their habitats take precedent over other purposes in the management and administration of a refuge. [emphasis added]

Thus, the mission of the Refuge may be different from lands managed by other agencies that might operate under a multi-use mandate. The Refuge's mandate does include provision of wildlife-dependent recreational use and educational and interpretive facilities so long as those actions are compatible with the conservation, management, and restoration of fish, wildlife and plants and their habitats.

Lastly, the following comment is not consistent with the many regional planning efforts by agencies such as the Bay Conservation and Development Commission (BCDC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB) who are working to address the impacts of sea level rise on infrastructure including public access trails and the Bay Trail:

Shoreline trails, the outdoor recreation feature in highest demand, are especially vulnerable to sea level rise impacts, and will become an increasingly limited resource. As sea level rises and storm events begin to cause more extensive and longer duration flooding, park and recreation assets along the Bay will become more costly to maintain, have services disrupted and compromised and some may disappear entirely. Of the few trails that are available in neighboring wildlife refuges, many are expected to be gradually lost to sea level-rise and storm

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¹⁹ Personal communication, Chris Barr, USFWS, Deputy Complex Manager, San Francisco Bay National Wildlife Refuge Complex ²⁰ Don Edwards SF Bay NWR Final Comprehensive Conservation Plan. USFWS. October 2012

event flooding. This particularly impacts people with limited mobility because it is difficult to maintain a proper trail surface on regularly flooded trails and unpaved trails close to the shoreline.

Based upon the information we have provided we ask that the mischaracterization of public access facilities provided at the ELER and Refuge be corrected to indicate that public access facilities are provided within ELER and the Refuge consistent with the mandates imposed on these lands. Futhermore, the statement regarding the impacts of sea level rise should reflect the fact that numerous agencies including those with oversight of ELER and the Refuge are working to address the impacts of sea level rise on public access facilities.

Impacts to sensitive plant species:

The DEIR and LUPA mention the presence of three rare plants Southern Wetlands Natural Unit – Congdon's Tarplant *Centromadia parryi ssp. Congdonii*) (CNPS 1B.1), Lesser saltscale (*Atriplex minuscula*) (CNPS 1B.1), and San Joaquin spearscale (*Etriplex joaquinana*) (CNPS 1B.2). What is the status of these populations of rare plants? This could represent the western-most known location of the lesser saltscale which would be regionally significant. Please provide 18 information on the current status of these species within the Southern Wetlands Natural Unit, and describe what protections will be afforded through long-term management, etc.

Failure to address Cumulative Impacts of proposed project on biological resources:

As stated in the comment letter submitted by Scott Cashen, the analysis of the cumulative impacts of the proposed project is completely inadequate. The DEIR provides only a single paragraph regarding the potential cumulative impacts of the proposed project on biological resources. The DEIR states:

Given the minimal adverse impact, and beneficial effects of the proposed habitat restoration and enhancement, on biological resources expected by the Project, and the extensive project specific mitigation measures proposed for the Project, which would reduce the Project's adverse impacts to biological resources to a less than significant level, the Project would not have a cumulatively considerable impact on biological resources. Thus, the Proposed Project would not make a considerable contribution to significant cumulative impacts on biological resources. This impact would be *less than significant*.

CCCR-19

The DEIR did not analyze the cumulative impacts of the current project on biological resources in the broader context of all the other development that is ongoing within and right up to the boundaries of the park. These development projects include the ACFCWCD flood control project along Ardenwood Creek (Line P), the dense recreational facilities that are under construction at the southern end of Coyote Hills Regional Park at the former Dumbarton Quarry site, the proposed new visitor center, the Bay Trail development along Ardenwood Boulevard and Paseo Padre Parkway and the ongoing ACFCWCD levee improvements, fish passage facilities and desilting projects on the Alameda Flood Control channel. The 2005 LUP states that the "Lake Unit" (former Dumbarton Quarry site) would become the recreational center of the park and that "large recreational spaces may not be needed in the future because of the eventual addition of the Lake Unit." Our question submitted during the scoping process remains unanswered - if this is the case, why is there a need for a picnic area near the area to be restored to oak savanna and mixed riparian forest? What are the cumulative impacts of increased public access trails and the concurrent fragmentation and disturbance associated with the trails, and the proposed picnic site, paved parking area, and very dense and extensive recreational facilities currently under construction, on the wildlife values of Coyote Hills Regional Park?

Conclusion:

Our organizations have worked to protect the lands currently under consideration for over three decades, beginning with the identification of these lands as a valuable potential addition to the Don Edwards San Francisco Bay National Wildlife Refuge. The restoration and expansion of the historic sausal and associated habitats could be of regional significance, as has been documented for decades by peer reviewed science. Unfortunately, the emphasis of the LUPA and DEIR seem to be on providing public access and recreational elements. Detailed drawings of public access trails and facilities are provided, while little information is provided regarding the proposed restoration activities. We recognize that permits required by regulatory agencies or species mitigation measure required by resource agencies may alter plans for restoration, however some indication of the specific targets by which successful restoration might be measured should have been provided. Instead we only have outlines on a map of where various types of habitat restoration might occur and the knowledge that 6,000 to 8,000 trees of various types might be planted. Pilot plantings might occur within the first year of implementation, but how soon afterwards an actua restoration plan is developed remains unclear. The failure to provide details regarding the proposed restoration in the DEIR is a fatal flaw that prevents analysis of potential impacts and/or benefits on biological and hydrological resources. We have provided a list of details that should be included with any restoration plan. We hope that this is something that is being considered and perhaps under development and we would like to have an opportunity to review and comment on that document.

We fully agree that public access and recreational facilities are important elements and contribute to the public's appreciation and enjoyment of the resources the EBRPD provides. The ability to walk in a natural environment improves our quality of life and increases recognition of the need for stewardship. However, care needs to be taken in siting such facilities, and these facilities should not be located in areas that would be to the detriment of regionally significant biological resources. Scientific literature strongly indicates that human disturbance can have significant, adverse impacts on biological resources.

We strongly urge the EBRPD to relocate the parking and picnic facilities to the south side of Patterson Ranch Road, and remove the spur trail on the west side of Patterson Slough. The Tule Lookout Trail should be removed from public access or open only on a seasonal basis to avoid disturbance of migratory waterbirds. The question to consider is whether EBRPD desires public access that will support restoration efforts to provide increased habitat for neotropical songbirds, rare or listed species, or that which will support species associated with urban areas that are potential competitors or predators of these species, such as rodents, raccoons, corvids, feral animals, etc.

Thank you for the opportunity to provide comments. We ask that we be notified of any future opportunities to provide comments on this matter.

Respectfully submitted,

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Response to Comments CCCR-1 through CCCR-20

Response CCCR-1

This comment provides general background information and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response CCCR-2

This comment provides general background information on the commenters and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response CCCR-3

The Draft EIR, including the existing or baseline biological conditions assessment, was prepared pursuant to CEQA requirements. CEQA recognizes that the level of specificity of an EIR is determined by the specificity of the project, such that the analysis in an EIR for a plan-level document, such as the LUPA and conceptual Park Development Plan, is necessarily more general than that required for a specific project such as a proposed residential or commercial development. (State CEQA Guidelines Section 15146). This Draft EIR provides a legally adequate level of baseline information and analysis of potential biological impacts and appropriate mitigation measures. CEQA requires analysis of potential impacts to candidate, sensitive, or special status species; riparian habitat or other sensitive natural community; wetlands; and native resident or migratory wildlife corridors or native wildlife nursery sites.

The Draft EIR analyzes all endangered, threatened, or candidate species under the federal Endangered Species Act and California Endangered Species Act; all fully protected species under California Fish and Game Code; and all species considered "species of special concern" by California Department of Fish and Wildlife as required under CEQA. Non-special-status native, migratory birds that might nest within the Project area were also considered, because these nests are protected under California Fish and Game Code Sections 3503 and 3503.5.

The Draft EIR provides a list of the special status wildlife and plant species that have been documented to occur or have some potential to occur within the Park expansion project area using existing biological studies completed for a prior and not-approved residential development project within the Project area, a completed flood control and stream restoration project within the Project area, a California Natural Diversity Database (CNDDB) 5-mile search area, and plant community, wetlands and wildlife field observations completed specifically for this proposed project.

Comments related to the need for conducting more detailed studies to properly evaluate potential project impacts, including protocol level and year-long surveys, future surveys and studies of wildlife and rare plants are noted. The Park District will consider this input prior to taking action on the EIR and LUPA. It is impractical to conduct protocol level surveys and year-long biological surveys now, because implementation of the LUPA and Park Development Plan will take many years and the presence, range, and needs of various habitats and species could change during that timeframe. The Park District will conduct additional surveys in the future as needed for development of detailed Restoration Plans, and as required by permit requirements.

Based on this appropriate plan-level biological information, the DEIR adequately evaluated impacts to sensitive plant and animal species, wetlands, wildlife habitat and sensitive natural communities such as Patterson Slough and proposed comprehensive mitigation measures that will ensure the LUPA and Park Development Plan implementation will not result in significant biological impacts and that as required, mitigation measures include performance standards, a timeline and person or agency responsible for monitoring and reporting successful completion of the mitigation measure.

See Responses CCCR-20 and SC-4 in regards to deferring full development of the restoration plan to be a part of Construction Plans and the Project HMMP..

See Responses CCCR-20, SC-7, SC-12, and SC-13 in regards to addressing adverse biological impacts of human disturbance associated with trails and picnic areas.

As noted on page 101 of the Draft EIR, for CEQA purposes, the baseline for evaluation of impacts, including on wintering raptors and migratory waterfowl, and the designation of existing conditions, is the date of Notice of Preparation (NOP), May 14, 2018.

See also CNPS-2, SCSF 1-21, and GGAS-3 for additional response information on biological resource information used, biological assessment methods, and adequacy of the baseline biological information for analysis and determination of impacts and development of mitigation measures.

Project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR, including mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This information is presented at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and to determine whether Draft EIR recommended mitigation measures are adequate. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

Response CCCR-4

The comment does not question the adequacy of the information nor the analysis within the Draft EIR and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

The Park District agrees with the level of importance placed on the historic willow sausal and mixed riparian forest along Patterson Slough. The LUPA recognizes the need to preserve, protect, and expand the willow sausal and associated oak savanna and seasonal wetlands and that is a central part of the overall plan and included as part of the proposed Special Protection Feature in the Patterson Slough Natural Unit.

Livestock grazing is a current and historic use of the property and may continue under the proposed LUPA principally for vegetation management purposes.

Response CCCR-5

The commenter would like to see more detail on how restoration will be implemented in a formal "Restoration Plan". As analyzed and described in the Draft EIR, the project will not have significant adverse impacts and will have beneficial impacts. If the project proceeds into the design development/implementation phase, it will be designed, developed and implemented in a manner consistent with the LUPA and Draft EIR Project Description, mitigation measures and build upon ongoing biological, soils, and hydrologic studies, including pilot test plot plantings completed to date.

For the commenter's information, the plans developed during the design development/implementation phase will utilize primarily locally collected seeds (mostly from Coyote Hills and Ardenwood Farm), propagated cuttings and live stakes and poles that will be contract grown and prepared by an experienced native plant nursery. The nursery's pathogen control program will be reviewed and approved by Park District IPM staff in the Stewardship Department.

The Plan envisions use of compost for weed seed bank suppression and planting soil improvement, and a temporary plant establishment irrigation system. Most of the restoration and establishment work is grant funded and/or part of Project impact mitigation, and the grant terms and permit requirements will in part determine success criteria, maintenance, monitoring and reporting requirements.

Project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR, including mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This information is presented at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and to determine whether Draft EIR recommended mitigation measures are adequate. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

Response CCCR-6

See also Response CF-17 for details on the Park District's Pathogen Control Program. The Park District and its sub-contractors, including native plant nurseries and native plant installation landscape contractors, will be required to follow (will be contained in Construction Contract Documents) the cited 2017 Phytophthora Working Group recommendations as well as the District's Phytophthora BMP's.

The oak trees within the Park Expansion area have been evaluated for signs of sudden oak death (SOD) and none of the trees examined show SOD symptoms. There are no SOD carrier trees (California bay or tan oaks) or coast live oak trees displaying SOD on the UC Berkeley Forest Pathology Lab Website (www.sodmap.org) within Coyote Hills or neighboring areas.

The Park District and ACFCWCD are coordinating their restoration activities, including courtesy peer review of construction plans. The City of Fremont also has review and approval authority of certain project elements. Most of the native plants to be used will be collected locally and

propagated by a specialty native plant nursery that has an approved pathogen control plan. Pilot test planting is underway to determine which plants are most successful.

Response CCCR-7

The commenter includes several differing questions in this comment, which are addressed separately below, and in order of comment:

Project Restoration Goals and Objectives: Project Restoration Goals and Project Objectives in the LUPA and which serve as a part of the CEQA Project Description have been revised to include many of the recommendations made in this comment, including adding additional special status bird species, wintering and neotropical birds, bats and other mammals and amphibians under "Wildlife Objective" and "Protected Species Objectives", expanding the "Wildlife Objective to include control of feral animals, and adding a Wildlife Movement Corridor Objective under "Upland Objective". Southern Willow Flycatcher, and Tricolored Blackbird, which are known to use emergent marsh and willow sausal habitat within and near the Project area are now also specifically mentioned in the revised LUPA (pages 70 to 72) and CEQA Project Description Objectives (DEIR page 43). See **SCSF1-23** for changes and edits that are also made to the LUPA.

The commenter asks if endangerment of unique and sensitive habitat as analyzed in the DEIR is only physical disturbance, such as trampling, or also includes disruption of ecosystem function and use. The term "Endangerment" in the context of impacts to unique and fragile ecosystems includes both physical impacts such as trampling, erosion, and vegetation damage, as well as significant disruption of ecosystem function such as by excessive noise and presence of staff and Park visitors within existing habitat areas.

The opinion of the commenter is noted regarding their concern that noise disturbance, human presence disturbance and habitat fragmentation associated with trail use will occur as a result of new trails allowing park visitors near (but not directly within) these unique protected and restored habitats. However, several things should be pointed out regarding this concern: a) the Park expansion area is a Regional Park, not a wildlife refuge, and park visitation for outdoor recreation and environmental education is an important Park use; b) the adjacent Coyote Hills Regional Park, to which the Park expansion area has been added, has many public access trails that traverse through emergent marsh wetlands and willow groves. Because of the large number and diversity of birds in this area, including many Special Status species present even with the occurrence of trails within or very near their habitat, Coyote Hills remains one of the top bird watching locations in northern California; and c) the environmental baseline for analyzing potential human disturbance and trail use impacts on wildlife is the existing ruderal/ low quality fallow farmlands, with their long and continuing disturbance history associated with farming and grazing, and existing perimeter trail system and internal roads used for operations (see DEIR page 73). Disturbance impacts, including habitat fragmentation, are discussed on DEIR pages 123 to 124, impacts on migratory, nesting, and Special Status bird species on DEIR pages 112 to 113, impacts on riparian habitat, sensitive natural communities, and wetlands on DEIR pages 118 to 119. A discussion of the existing and ongoing problem of feral wildlife, including feral cats and the continuation of the Park District's ongoing feral animal control, is discussed in Response SCSF1-24. Ordinance 38, which governs issues such as dogs on-leash, off-leash areas, and areas where dogs are restricted, including the existing willow

sausal and restored willow and mixed riparian areas, are discussed on DEIR pages 42 and 192. This Ordinance will continue to be enforced with no proposed changes.

The Patterson Slough riparian area and surrounding wet meadow and willow thicket are proposed to be Special Protection Features and defined on page 79 of the LUPA. The Board of the Directors has the discretion to designate or modify Special Protection Features through its periodic review of Ordinance 38. Park and Stewardship Staff are responsible for the preservation and protection of Special Protection Features and take actions necessary to ensure this. For example, they may prescribe and implement seasonal trail closures, resource protection signage, repair or install new physical barriers such as fences, berms or vegetative screening, as well as calling for new or modified monitoring and increased enforcement and patrol (as needed) enforcement by District staff.

Project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR, including mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This information is presented at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and to determine whether Draft EIR recommended mitigation measures are adequate. The Draft EIR is thus in compliance with CEQA, and additional analysis or mitigation is not required.

Response CCCR-8

Project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR, including mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This information is presented at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and to determine whether Draft EIR recommended mitigation measures are adequate. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

The Draft EIR correctly addresses potential impacts that may occur from implementation of the project elements on existing (baseline) conditions (Section 4.1 Biological Resources Standards of Significance, page 101). It is beyond the scope of the EIR to predict or evaluate potential future impacts to potential future habitat conditions. Project features have been proposed and sited with the intent to restore and enhance wildlife habitat and adaptive management would be utilized to address future conditions. Picnic and public access facilities proposed are a minimum of 100 feet from the existing riparian edge, and the proposed willow sausal expansion area would typically provide 100 to 200 feet of separation from public use. The City of Fremont Watercourse Protection Ordinance prescribes a minimum 30-foot setback for development and nearly all Stream Setback Ordinances for cities and counties in the greater San Francisco Bay area use setbacks of 25 to 50 feet, with only a few using 100 feet. In addition to the setback, native landscape berms and fencing would be used to further mitigate the sort of potential impacts described by the commenter. The proposed setback distance, fencing, and landscaped berms would provide mitigation in that they include a physical and space separation and barrier, as well as visual/disturbance and noise attenuation between the park visitor use areas and areas of existing and proposed habitat.

Response CCCR-9

No new trails are proposed that encircle Patterson Slough or bisect existing sensitive habitat. Existing trails along Crandall Creek and ACFCC are outside the Project area. The existing Tuibun Trail will continue to be used.

See Responses SC-1 through SC-27 for responses to the comments of Scott Cashen referred to in the comment.

Response CCCR-10 and CCR-11

Project-specific impacts of the proposed Project on biological resources, including special status and migratory birds, raptors, and waterfowl, are evaluated on pages 112-113 of the Draft EIR. As discussed in CCCR- 3, this information is presented at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and to determine whether Draft EIR recommended mitigation measures are adequate. The Draft EIR is thus in compliance with CEQA, and additional analysis is not required.

Patterson Slough and the willow sausal are located within 200 feet of Patterson Ranch Road, 300 feet of Paseo Padre Parkway, and adjacent to an existing maintenance access road. Deer, skunks, raccoons and other mammals are currently present within the area, as well as non-native red fox and feral cats, which would continue to be controlled by the Park District associated with their long-standing exotic species and feral animal control program within the adjacent Coyote Hills Regional Park. This is an ongoing program within the Park Expansion area.

As noted on page 101 of the Draft EIR, for CEQA purposes, the baseline for evaluation of impacts, including on special status bird species, wintering raptors and migratory waterfowl, is based on the existing conditions, as of the date of Notice of Preparation (NOP), May 14, 2018. The existing conditions are ruderal, former agricultural fields with low habitat value and low current use by special status birds, migratory birds, and wintering waterfowl, not future conditions following wetlands restoration and anticipated increased bird use. The existing Tuibun Trail and Crandall Creek Trail, as well as the maintenance access road along the west side of Patterson Slough, and along Ardenwood Creek, are a part of the baseline with respect to evaluating potential human disturbance impacts on bird species. Therefore there would be insignificant impacts of new trail use on these species.

See also Response CCCR-7, referring to potential seasonal closure of some trails during migratory waterfowl use periods.

Response CCCR-12

As currently proposed, dogs on leash would be allowed on the Oak Trail and Patterson Slough Trail, including the spur to the east side of Patterson Slough. The Spur Trail would terminate just outside of the restored willow sausal. This area is ponded during winter months and the wildlife observation platform may ramp up to the elevated platform via a boardwalk-like structure with railings that, along with signage and fencing, would serve to keep trail users and their dogs on leash out of sensitive habitat.

The proposed new trails do not entirely surround or encircle the restored willow/riparian habitat. For instance, the Patterson Slough lookout only extends about one-quarter of the way along the west side of the Slough, and no bicycles/dogs are allowed on this spur. Our estimate is that less than 10% of the proposed restored willow/mixed riparian forest has edge or peripheral trail user access. See also response CCCR-20.

Providing wildlife oriented public access is one of the project objectives, and this includes providing the public with the opportunity to view (currently ruderal) habitat areas that are in the process of restoration as part of a complex and diverse ecosystem. Not all areas of the site are proposed to be accessible by the public, and adaptive management techniques would be employed when needed to protect sensitive areas. For instance, the majority of the willow sausal and existing Patterson Slough are located within a designated Special Protection Feature, where public access would be restricted.

The possible alternative of removing the east and west side of Patterson Slough spurs and wildlife observation platforms, suggested by the commenter, was not one of the alternatives considered in the alternatives analysis as there was strong stakeholder support for wildlife observation areas and environmental education at the community meetings and these are key Project objectives. Removing the spur trails from the project would reduce recreational opportunities onsite and reduce the project development footprint. It would not result in any new significant impact not already analyzed in the Draft EIR. The analysis of impacts on biological resources in 4.1 Biological Resources, pages 65-129 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project.

Comments concerning the removal of the east and west spurs to Patterson Slough will be reviewed and considered by the Park District Board of Directors during public review of the LUPA and Final EIR. .

Response CCCR-13

Restoration, along with accompanying limitations on public access are proposed for significant portions of the site, including most of Patterson Slough and the proposed willow sausal and mixed riparian forest restoration area. The two proposed spur trails provide opportunities for wildlifeoriented observation of evolving habitat areas that are currently weedy or ruderal, as described in the baseline conditions. A monitoring program would be implemented as part of the LUPA, including use of IT soil sensors for real time monitoring of soil moisture, salinity, pH, CO2 and O2 levels and adaptive management techniques are proposed to be employed based on the monitoring and when/where needed to protect sensitive areas, if and when sensitive habitat is present.

The comment regarding alternative trail design, and seasonal trail closures during use periods by migratory winter birds, in the Proposed Project will be forwarded to the Park District Board of Directors for its consideration prior to any final decision on the Project, LUPA and CEQA documents. This will also be discussed with ACFCWCD as part of the HMMP preparation and project permitting.

The need for seasonal trail closure to protect migratory birds and waterfowl is an operational decision that is currently and will continue to be considered by Park District staff biologists and

naturalists and is included as part of the project (LUPA, pages 71 and 91). Also see Response CCCR-12.

Response CCCR-14

The Southern Wetlands Natural Unit currently consists of previously farmed ruderal land with low habitat value, with a small area of seasonal jurisdictional wetlands within a former farm ditch. Compensatory mitigation would include incorporating the ditch to a mix of wetland and upland habitat.

The wetlands mitigation plan for this area is currently under development with the U.S. Army Corps of Engineers, and final mitigation requirements and permit conditions have not yet been identified. Further, it is outside the scope of this EIR to analyze impacts and mitigation measures for future projects that ACFCWCD may propose to mitigate impacts for at the project site. The EIR here properly focuses on the impacts of the proposed Project and proposed mitigation for those impacts. Furthermore, a significant impact would not result from the project if habitat created at the southern wetlands does not qualify for mitigation credits for future ACFCWCD projects.

As for the commenter's concern regarding the trails' impacts to wildlife, including waterfowl, those impacts are discussed in Section 4.1 Biological Resources.

The commenter suggests a 200 meter (approx. 660 feet) buffer between trails and wintering waterfowl. However, it is not possible to provide 200 meters of separation from human use throughout most of the Project site, because much of the site is within 90 meters (approx. 300 feet) or adjacent to existing developed areas including roads, utility lines, existing trails, maintenance access roads, and other infrastructure. For instance, the levee road from Paseo Padre Parkway to the Alameda County Sheriff's Shooting Range/Coyote Hills forms the southern boundary of this unit. As such, it is possible that the quality of overwintering habitat created and used by waterfowl may not be as valuable or protected as nearby NWR and ELER lands that provide extensive areas where public access is more restricted. It is noted that the FWS LaRiviere Marsh Trail (approximately ¹/₂ mile south of the LUPA area) is within 200 meters of roads and other developed areas, and is noted as a location to view endangered Ridgway's rail⁵.

Adaptive management techniques (see LUPA pages 21, 25, 28 and 82) are proposed to be employed when needed to protect existing and future/restored habitat areas, such as by consideration of seasonal trail closure, increased signage and fencing and woody tree and shrub buffer planting, temporary closure for fencing, and re-seeding/re-planting any disturbed or damaged areas, and additional park ranger patrol. See also Response CCR-13.

Response CCCR-15

The information presented in the LUPA correctly describes existing facilities within Eden Landing Ecological Reserve (ELER). A final decision has not yet been made on the ELER, and thus the extent of additional recreation and public access facilities remains undetermined.

⁵ https://www.fws.gov/refuge/don_edwards_san_francisco_bay/Visit/LaRiviere.Marsh.Map.html

Response CCCR-16

The information presented in the LUPA reflects the extent of trails in the project vicinity within the Alameda County portion of the NWR. As noted on the FWS website, many of the trails at Don Edwards Fremont headquarters are constructed on dirt levees that are inaccessible during rainy conditions⁶.



Newark Slough Trail

The remainder of the comment does not question the adequacy of the information nor the analysis within the Draft EIR. It provides general information regarding the Don Edwards San Francisco Bay National Wildlife Refuge, which is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response CCCR-17

The information presented in the LUPA correctly describes the vulnerability of existing or proposed facilities in the project vicinity with respect to the impacts of sea level rise. This includes public access trails and the Bay Trail within Don Edwards SF Bay National Wildlife Refuge (NWR) and Eden Landing Ecological Reserve (ELER).

Several existing public access trails in the NWR headquarters area have segments that are presently at elevation +11 or less (NAD 88), and or/located on unreinforced levees, including the Newark Slough Trail, Shoreline, No Name, and Newark Slough Trails. Portions of the Alameda Creek Trail at its western end are also below elevation 12.

An assessment prepared in 2006 for SBSP levees indicated that degradation of the levees in the area is primarily due to subsidence, stability, and erosion⁷. Although the study focused on SBSP levees (which include ELER but not all of the NWR levees in the vicinity), it is likely that some of the existing levees with trails on them (not including ACFCC) are of similar construction and have similar issues. As described in the assessment, almost all of the levees are underlain by very soft, highly compressible, unconsolidated Bay Mud, and subject to moderate to high liquefaction. These trail-topped levees would have been constructed by excavating materials from within adjacent ponds and casting the excavated material to the side to form the levees. This technique is also used to raise the levees. Levee degradation occurs as a result of Bay Mud subsidence, regional groundwater depletion, liquefaction and erosion.

⁶ https://www.fws.gov/refuge/don_edwards_san_francisco_bay/Visit/Newark.Slough.Map.html

⁷ South Bay Salt Ponds Restoration Project Levee Assessment, Geomatrix Consultants, October 2016

As indicated in the assessment, levee degradation is expected to continue in the future, exacerbated by subsidence resulting from consolidation of Bay Mud under the weight of new fills and slope failure resulting from placing new fill on existing weak levee materials. The management of the levees will be increasingly difficult with sea level rise.



Shoreline Trail

Cargill maintains the NWR levees/trails (such as Newark Slough Trail) that surround active ponds. Prior discussions with Cargill staff indicated that frequent "topping" to correct for subsidence is required and that this need will be exacerbated with sea level rise. The La Riviere Marsh Trail and portions of Marshlands Road were recently improved, including a sidewalk⁸. No other expansion or physical improvements to NWR trails at the Fremont Visitors Center are currently planned.



Newark Slough Trail (maintained by Cargill)

Regarding ELER, the ELER Final EIR indicates that new trail sections would be located on improved levees that area at elevation 12.0 or above. However, as discussed in technical Appendix G of the Draft EIR (http://www.southbayrestoration.org/EIR/Phase2_Eden_Landing_Final_Environmental_Impact_Statement_Report.html), portions of the existing Bay Trail within the Phase I portion of ELER are at elevation 10 or less, including the 20 Tide Gate structure that is proposed to cross Old Alameda Creek. It is unclear whether structural improvement of these existing levees and trail segments would be addressed in Phase II ELER work, or whether new trail improvements would be limited only to those levees improved for other project purposes.

⁸ Gennie Moore and Winnie Chan, FWS, personal communication

These trails are subject to increased tidal flooding associated with sea level rise, and some of these levees have not been structurally improved. In addition, if the trail is located in an area adjacent to occupied sensitive species wetlands, future efforts to raise or reconstruct the trail may be very problematic or impermissible.



Existing ELER Bay Trail

Response CCCR-18

The three rare plants that occur in the Southern Wetlands Natural Unit and discussed on pages 100 to 101 of the DEIR will continue to be monitored and protected. They were observed in the summer of 2017 during construction of Line P improvements by ACFCWCD. Seed from the plants was collected and has been kept in cool storage since then. The plants were observed during site visits in 2018, and dried/residual stems were observed in April 2019. These plants are typically best observed during the late summer and fall.

Final construction plans for the ACFCWCD wetlands construction will include provisions to avoid the existing plants to the extent feasible. In addition, seed will be collected during pre-construction surveys, and saline/alkali topsoil will be collected to enable live seeding and transplanting at the site. Seven years of post-construction management and monitoring of reestablished rare plant areas is proposed by ACFCWCD.

See also CNPS-5-11 and SC-9 and SC-11.

Response CCCR-19

As discussed in the evaluation of project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR. The combined effect of past projects, the current projects identified in the Project vicinity, and probable future projects would result in a significant loss of biological resources. This is a significant cumulative impact on biological resources in the City of Fremont and adjacent unincorporated areas. The Proposed Project's design, and implementation of mitigation measures identified in the Draft EIR, would reduce the impacts of the project on sensitive biological resources to a less-than-significant level. Many of the planned facilities are located on or within existing developed areas or disturbed ruderal lands. A mosaic of habitat types would be created, enhanced or restored, which would contribute to species diversity as well as address climate adaptation projections. No public access or recreation facilities are proposed within Special Protection Features. Expansion of Coyote Hills Regional Park, which would balance habitat enhancement with public use, restore disturbed areas and support climate smart agriculture, would meet community goals for sustainable public access and recreation. For these reasons, the remaining Project-related contribution to cumulative impacts on biological and wetland resources would not be cumulatively considerable, and would not contribute to cumulative impacts on biological resources when viewed in connection with the effects of past, current and probable future projects. The cumulative impact of the Proposed Project on biological resources would be less than significant.

The commenter also inquires about the need for additional picnic facilities. The 2005 LUP consistently cited the deficiency in picnic facilities. The commenter's quotation regarding the Lake Unit and recreational use did not include the following sentence from the 2005 LUP:

"An emphasis on picnicking at the Lake Unit is not expected to fill the need for a few additional picnicking facilities in the existing park."

Provision of picnic facilities is consistent with both the 2005 LUP and proposed LUPA, and the picnic facilities to be provided would encompass some of the picnic facilities that were not implemented as part of the 2005 Plan. The 2005 LUP states:

"Picnicking is extremely limited at Coyote Hills with only about 15 individual picnicking sites which are quickly taken on good weather weekend days. While more picnic sites are expected to be added with the future Lake Recreation Unit, there is a deficiency of picnicking facilities in the existing park. The park serves as a lunch spot for employees in the nearby industrial park and as a community park for many local residents, particularly those without yards."

This statement was made in the 2005 LUP prior to the recent redevelopment of the adjacent industrial park that creates an even larger demand for lunch hour and early evening park use.

Response CCCR-20

This commenter states that the apparent focus of the proposed Project is on providing public access and recreational features (not restoration). The commenter also requests additional information on the restoration plan. For purposes of placing agricultural uses, public access and recreational uses, including infrastructure, in perspective with restoration and enhancement, the following is provided:

<u>Use</u>	<u>Acres</u>	Percent %
Agriculture	42-45	13.7-14.7
Parking, Maintenance, and Infrastructure	13-15	4.2-4.9
Trails ⁹	17-19.5	5.5-6.3
Restoration & Enhancement	225-230	73.5-75.2

Restoration and enhancement is about 73.5 to 75.2 % of the land use, agriculture is approximately 13.7-14.7 %, parking and infrastructure 4.2 to 4.9%, and existing and proposed new trail use, is about 5.5 to 6.3 %.

⁹ Trails are also to be used for restoration and maintenance, vector control, and flood control access, emergency response, and special stewardship events.

Patterson Slough is approximately 3,800 lineal feet long, measured along its centerline, and varies in width from willow drip line edge to edge from about 140 to 200 feet across, and occupies approximately 11.3 acres. The proposed spur trail and wildlife observation platform on the west side of Patterson Slough would be on the west side of the southern portion of the slough on an existing access road. This is the approximate area that might be most affected by the proposed trails and infrastructure. This represents a potential impact area associated with human disturbance of between 1.4 and 2.8 acres relative to the target restoration and enhancement of between 75 and 95+ acres of willow sausal, mixed riparian forest, and oak woodland, depending on the final restoration and enhancement construction plan. The HMMP will identify the specific area that will be restored to compensate for any temporary disturbance to existing willow sausal habitat associated with removal of the Farm Labor Contractor's Residence, and improvement of the existing maintenance access road on the west side of the Slough for use as a Spur Trail. These spur trails, and all trail areas will also provide access for restoration and enhancement work, vector management, routine maintenance, and emergency response.

Project-specific and cumulative impacts of the Proposed Project on biological resources are evaluated on pages 65-129 of the Draft EIR, including mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This information is presented at a level of detail that is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and to determine whether Draft EIR recommended mitigation measures are adequate. Restoration and expansion of habitat around the Patterson Slough historic sausal and adjacent areas is an important component of the LUPA, which provides land management prescriptions to support approved Project objectives that balance habitat enhancement, address climate change issues, and provide opportunities for recreational use of the Regional Park Expansion area.

The Park District plans, constructs, maintains, and operates five kinds of facilities (EBRPD Master Plan, 2013):

- *Regional Parks* where the objective is a rough balance between habitat and natural and cultural resources protection and management, <u>and public access and recreational facilities</u>. These facilities take up no more than 30% of each Park's land area.
- *Regional Preserves* where additional emphasis is placed on protection and preservation of open space areas containing historic and cultural resources, unique geological and paleontological resources, and natural resources with unique and sensitive habitat areas, <u>and</u> where public access facilities are more limited in scope. Other than hiking trails, outdoor recreation facilities are not provided. Typically, public access facilities occupy less than 10% of the Preserve's land area.
- *Regional Recreation Areas* where additional emphasis is placed on providing recreational facilities. These facilities may occupy more than 30% of a Recreational Area's land base.
- *Regional Shorelines* where due to proximity to San Francisco Bay and the Delta, the emphasis is on provision of facilities for water access, including visual access and enjoyment. Recreation-related facilities may also occupy more than 30% of the Shoreline Park.
- *Regional Trails* which consist of long, linear strips that provide transportation and recreational facilities across larger land areas. These include Regional Trails along flood control channel maintenance roads and along abandoned railroad lines, as well as areas

where the Park District is responsible for construction and operation of the San Francisco Bay trail. Because the available right of way is narrow and limited along these routes, improved trail facilities may occupy more than 60% of the land area.

The Park expansion area is an addition to Coyote Hills <u>Regional Park</u>. Referring to the above Master Plan guidelines, the LUPA complies with development intensity guidelines for Regional Parks and provides an appropriate balance among the Project objectives of historic and cultural resources protection and interpretation, natural resources protection, enhancement, and restoration, agriculture, and public access and recreational facilities. The total of 4.65 miles of existing and new hiking trails and multi-use trails account for approximately 19.24 acres, or about 6.3 % of the Park expansion area. Together with existing and proposed parking and infra-structure, the total is about 11.2 % of the 306 acre Park expansion area.

The use of recently installed pilot planting plots and ongoing biology, soils, and hydrology studies will inform restoration and enhancement work. Restoration details are described in the LUPA on pages 22 to 23 and pages 84 to 85, with additional detail included in the discussion of each Natural Unit. The LUPA gives acreages of specific planned land cover types/vegetation communities and shows their spatial relationship to proposed park development and habitat type conversion. The LUPA calls for avoiding or minimizing impacts to mapped high value habitat. In areas where this cannot be accomplished, the HMMP includes specific restoration targets that will reduce impacts to less than significant. Most of the park expansion land cover is ruderal and the LUPA calls for these areas to be converted to land cover types with higher habitat values. For example, some areas will be converted from ruderal vegetation to oak woodland. Targeted land cover/vegetation community types associated with future restoration work will improve habitat from existing conditions. If the restoration effort were to fail, habitat value will not be degraded below pre-project conditions.

Restoration work will employ adaptive management strategies that include monitoring and allow for adapting the approach to restoration plans that responds to changing conditions. It is necessary to keep <u>technical aspects of implementation options</u> flexible in order to be able to respond to changing conditions. Additional details cannot be determined until the Board approves the LUPA and the Park District determines the specific elements of the project to implement in the design development phase of the Project. Construction Bid Documents <u>and implementation actions</u> will be in substantial conformance with the CEQA Project Description and LUPA, and as required by any regulatory permit conditions. Restoration target acreages and habitat land cover types are listed in Table 7-1 of the LUPA, and performance criteria are discussed in Response SC-20.

See also Response SC-4.

If the project plan undergoes changes, the Park District will comply with CEQA and prepare any required additional environmental documentation to address substantially new or revised project elements and associated impacts or changed circumstances.

The commenter's comments regarding location of the parking and picnic facilities and regarding the Tule Lookout Trail do not question the adequacy of the information nor the analysis within the Draft EIR. The comments are noted and will be conveyed to the Park District Board of Directors for consideration prior to any final decision on the Project.

The LUPA proposes that trails be located in existing disturbed areas or ruderal areas, includes spurs and viewing platforms that do not intrude into existing sensitive habitat, and provides setbacks for the placement of new facilities near Sensitive Protection Features, including Patterson Slough. Existing trails and maintenance access roads have been included in the concept Trail Plan. The writer's concurrence that public access and recreation facilities are important elements of the project is noted; the LUPA includes locating trails on existing roads and/or within disturbed ruderal habitat and proposes separation from potentially sensitive wildlife. This is consistent with local, regional and federal goals to provide the public with opportunities to view and enjoy open space while avoiding existing sensitive wildlife habitat.

Existing and proposed new trails and public access facilities represent less than 17% of the 306-acre site, and the site's proximity to urban lands make it an ideal location for the public to observe wildlife and witness ongoing habitat enhancement and climate change adaptation as it evolves, providing opportunities for nature-based outdoor education for the adjacent urban population. These are consistent with Project goals and objectives and the Park District's Master Plan definition of a Regional Park, described above. Precise trail design would employ setbacks, screening, fencing, and/or other design tools to minimize disturbance to sensitive areas, and these efforts would be closely monitored and managed over time through an adaptive management process.

Patterson Slough is located less than 300 feet away from highly urbanized land, and it is not possible to apply the extensive buffers recommended in various wildlife studies to create "ideal" habitat conditions. The LUPA seeks to improve existing habitat that is at the margin of extensive habitat managed by FWS and CDFW for wildlife use.

The commenters' suggestion to eliminate approximately 50% to 60% of proposed trails would limit opportunities for passive outdoor recreation and conflict with District, City of Fremont, regional and FWS goals for access to open space, as well as conflict with goals to provide regional bicycle and pedestrian trail connections. Further, the LUPA is a balanced plan; simply fencing off areas to preclude use and adaptive management does not meet District and regional goals for habitat improvement and sustainability.

At a regional scale, implementation of the Coyote Hills LUPA supports and complements the wildlife protection and habitat restoration efforts being undertaken by FWS and CDFW within the adjacent 15,000 (combined) acres of FWS/ELER Refuge lands, where opportunities for sustainable public access to open space are limited. Expansion of Coyote Hills Regional Park, which would balance habitat enhancement with public use, restore disturbed areas, and support climate smart agriculture and Climate Smart restoration would meet community goals for sustainable public access and recreation.

A public hearing will be held at an EBRPD Board meeting following publication of the Final EIR, containing responses to all comments submitted on the Draft EIR. Certification of the EIR and adoption of the project will be considered at that meeting. Notice of the meeting will be sent to the same parties that were notified of the publication of the Draft EIR and any additional parties that request notification.

See also Response SC-4.

Citizens for East Shore Parks

Citizens for East Shore Parks

PO Box 6087, Albany, CA 94706 Office: 510.524.5000 | Fax: 510.526.3672 Office: 1604 Solano Avenue, Albany, CA 94707 www.eastshorepark.org cespmanager@eastshorepark.org

May 7, 2019

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Ms. Karla Cuero East Bay Regional Park District Acquisition Stewardship and Development Division 2950 Peralta Oaks Court, Oakland CA 94605

Re: DEIR – Coyote Hills Restoration and Public Access Project/SCH #2018062002

Dear Ms. Cuero,

Citizens for East Shore Parks (CESP) appreciates the opportunity to comment on the Draft Environmental Impact Report for the proposed Coyote Hills Restoration and Public Access Project, in Fremont, California.

CESP applauds the East Bay Regional Park District - this is a stellar addition to the Coyote Hills Regional Park. It adds 306 acres that will preserve shoreline habitat and enhance public access to CESPa continuous open shoreline in the East Bay. In doing this you are taking part in the much larger 2 effort to preserve the fragile ecosystems that are under assault by climate change. Thank you.

We believe that the concerns raised by the Sierra Club on the balance between public access and protection of environmental resources should be examined and the final EIR address the issues raised in the letter of the East Bay Lands Committee in its comments on the DEIR.

As a 30-year plus organization dedicated to the preservation of habitat, parks and open space along San Francisco Bay, CESP is especially concerned about any activities that can damage wildlife and habitat. This part of the shoreline sits next to the Don Edwards Wildlife Refuge, an area set aside to provide protected area for migratory birds.

The DEIR discusses the use of herbicides for vegetation control and to kill invasive plants. Studies show that use of pesticides and herbicides adversely impacts birds, other wildlife and habitat. CESP-Given the continued assault on habitat, CESP believes the Park District needs to further study any ⁵ pesticide use for the area under question and believes pesticide use would contradict the goals to protect and expand habitat.

The proposed development of new trails is significant. CESP supports trail access and believes expanding trails can be done safely to avoid interfering with habitat and the use of the area by migratory and sheltering birds and fauna. The trail plans for Coyote Hills should be revised to prevent segmenting of bird habitat, or the encircling of habitat area where it unduly impacts wildlife. No trails should be added to areas where special status species exist.

We are confident that the District can handle the job of protecting habitat and expanding and maintaining parks. Thank you for the work you do – we are all grateful.

Sincerely,

Shirly Dear

Shirley Dean, CESP President

Kolent Cleast

Robert Cheasty, CESP Executive Director

CESP

CESP-1

The commenters makes introductory comments, which are noted.

CESP-2

The commenters make general comments in support of the Project. Comment noted.

CESP-3

The commenters generally state that comments submitted by the Sierra Club regarding balancing public access and protection of environmental resources should be addressed in the Final EIR. Please see Responses SCSF1-2 through SCSF1-24.

CESP-4

The commenters generally state their concern that project-related activities may impact wildlife and habitat. Please see Responses SCSF1-2, SCSF1-3, SCSF1-4, SCSF1-5, SCSF1-6, SCSF1-8, SCSF1-9, SCSF1-11, SCSF1-12, SCSF1-14, SCSF1-15, SCSF1-16, SCSF1-17, SCSF1-18, SCSF1-19, SCSF1-20, SCSF1-21, SCSF1-22, SCSF1-23, and SCSF1-24.

CESP-5

The commenters state that the Park District should further study any pesticide use considered as part of the Project. Please see Response SCSF1-10.

CESP-6

The commenters state that the trail plans for Coyote Hills should be revised to avoid impacts on habitat and special status species. Please see Response SCSF1-11.

CESP-7

Comment noted.

E. Private Firms and Individuals

Carin High

Voicemail/Call/Email from Carin High – Wednesday 4/3/19

•	Carin called to ask about DEIR mention of bank swallows found at Flood Control project at Line P under the culvert	CH-1
•		CH-2

Response to Comment CH-1

Response CH-1

The commenter requested information regarding the DEIR's statement regarding bank swallows found at the Flood Control Project under Line P culvert. This issue was researched and the notation that bank swallows were found within the Paseo Padre Parkway/Line P culvert as reported in Table 4.1-1 of the Draft EIR is incorrect. The swallows observed were cliff swallows. The text discussion on page 91 of the Draft EIR is correct. Table 4.1-1 of the Draft EIR is revised to reflect cliff swallows, not bank swallows, as occurring within the Line P culvert. See Response GGAS-11.

In addition, a paragraph that was erroneously placed under the Burrowing Owl Discussion has been moved to the Bank Swallow discussion.

The Bank Swallow/Burrowing Owl discussions on page 91 of the Draft EIR are revised as follows:

Bank Swallow (Riparia, riparia) - State Threatened, California Threatened

Bank swallows (*Riparia riparia*) have a very wide distribution throughout the world, but in California are concentrated primarily along the Sacramento and Feather rivers. Their nesting habitat consists of vertical caves, sand banks, and along marshes and river banks. Within the Project area, this species are known to occur to the west within Coyote Hills Regional Park; however observed occurrences are rare and they have not been observed or confirmed to be present within the Project area.

Non-Special Status species of swallow are more commonly observed within the Project area, and include: cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), and barn swallow (*Hirunodo rustica*) species. Cliff swallows (a non-listed migratory species) were observed nesting within the Paseo Padre Parkway – Ardenwood Creek/Line P culvert during Pre-construction Biological surveys completed for the ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area project 2016. These cliff swallow nests are protected under the Migratory Bird Treaty Act of 1918 Section 703 and were accordingly protected from disturbance during construction of the culvert.

Burrowing Owl (Athene cunicularia) - CDFW Species of Special Concern

Burrowing Owl (BO) are endemic to the grasslands, rangelands, disturbed agricultural areas, and deserts of North America. BO nest and roost within underground burrows such as those excavated by ground squirrels, prairie dogs, and gophers. Nesting season begins in late March or April. Unlike other owls, the BO is frequently active during the day but accomplish the majority of their hunting at night, preying upon small rodents, and insects. BO has been observed within the Project area, and in the neighboring Coyote Hills Regional Park. The ruderal grasslands, and agricultural fields within the Project Area provide suitable nesting and foraging habitat for this species.

Non-Special Status species of swallow are more commonly observed within the Project area, and include: cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), and barn swallow (*Hirunodo rustica*) species. Cliff swallows (a non-listed migratory species) were observed nesting within the Pasco Padre Parkway – Ardenwood Creek/Line P culvert during Pre-construction Biological surveys completed for the ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area project 2016. These cliff swallow nests are protected under the Migratory Bird Treaty Act of 1918 Section 703 and were accordingly protected from disturbance during construction of the culvert.

Response CH-2

The reports from Dr. Sam McGinnis were provided as PDF files by email to Carin High, as requested, and will be included in the Administrative Record.

Scott Cashen, MS

April 22, 2019

Ms. Karla Cuero East Bay Regional Park District Acquisition, Stewardship, and Development Division 2950 Peralta Oaks Court PO Box 5381 Oakland, CA 94605

Subject: Comments on the Draft Environmental Impact Report and Land Use Plan Amendment for the Coyote Hills Restoration and Public Access Project

Dear Ms. Cuero:

This letter contains my comments on the Draft Environmental Impact Report ("DEIR") and Land Use Plan Amendment ("LUPA") prepared by the East Bay Regional Park District ("District") for the Coyote Hills Restoration and Public Access Project ("Project" or "Proposed Project"). I am submitting these comments on behalf of The Citizens Committee to Complete the Refuge.

The Proposed Project includes two main components: (1) approve a Land Use Plan for 306 acres of land that would be added to the existing Coyote Hills Regional Park (referred to as the "Expansion area"), and (2) construct the elements of the District's Park Development Plan. The Park Development Plan includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, signage, over four miles of new hiking trails, wildlife observation platforms, and approximately 130 acres of habitat restoration and enhancement.

I am an environmental biologist with 26 years of professional experience in wildlife ecology and natural resources management. I have served as a biological resources expert for over 125 projects in California. My experience and scope of work in this regard has included assisting various clients with evaluations of biological resource issues, reviewing environmental compliance documents prepared pursuant to the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"), and submitting written comments in response to CEQA and NEPA documents. My work has included the preparation of written and oral testimony for the California Energy Commission, California Public Utilities Commission, and Federal courts. My educational background includes a B.S. in Resource Management from the University of California at Berkeley, and a M.S. in Wildlife and Fisheries Science from the Pennsylvania State University. A true and correct copy of my current curriculum vitae is attached hereto.

I have particular knowledge of the biological resource issues associated with the Project through my work on several other projects in the region. The comments herein are based on my review of the environmental documents prepared for the Project, a review of scientific literature pertaining to biological resources known to occur in the Project area, and the knowledge and experience I have acquired during more than 26 years of working in the field of natural resources management.

PROJECT DESCRIPTION

Project Objectives

The LUPA lists objectives that "were used to help scope the Park Development Plan."¹ However, the extent to which those objectives were incorporated into the Proposed Project and Park Development Plan is unclear. Based on the DEIR, several of the objectives appear to have been omitted from the Proposed Project. For example, the DEIR does not include a program to control invasive weeds and feral animals (i.e., objectives 3c and 5).² As a result, the DEIR needs to clearly articulate: (a) which of the objectives listed in the LUPA have been incorporated into the Proposed Project, and (b) the actions the District will implement to achieve those objectives.

According to the DEIR, one of the Project objectives is: "Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities."³ This objective is too vague to evaluate the Proposed Project and Project alternatives. The entire site contains biological resources, and as the DEIR acknowledges: "[t]he Project area contains a variety of native and non-native plant communities that provide a diversity of wildlife habitat."⁴ Undoubtedly, some habitat types and species will be positively affected by the Project, whereas others will be negatively affected by it. To enable proper review of the Proposed Project, the DEIR needs to specify the specific biological resources targeted for protection and enhancement.

Habitat Restoration and Enhancement Program

The Park Development Plan includes a relatively large habitat restoration and enhancement program. In addition, the DEIR incorporates habitat restoration and enhancement as a means of mitigating the Project's significant impacts on sensitive biological resources. Morrison (2002) provides a summary of the basic information needed for a successful restoration plan:

Much of restoration involves improving the conditions for native species of wildlife. To be ultimately successful, our restoration plans must be guided by the needs of the wildlife in the project area. We need information on species abundances, distribution, both current and historic. We need details on habitat requirements, including proper plant species composition and structure. We need to understand niche relationships, especially constraints on resource acquisition. We need to know food requirements and breeding locations. We need to understand the role that succession will play in species turnovers. We need to know the problems associated with exotic species of plants and animals, the problems of restoring small, isolated areas, and more...*Applying general prescriptions most often leads to unpredictable results, some of which may cause more harm than good.*⁵

The District has not collected data on the abundances and distribution of native wildlife in the Expansion area. In addition, it has not assessed the factors affecting habitat use in the Expansion

SC-2

SC-3

¹ LUPA, p. 71.

² Ibid.

³ DEIR, p. 43.

⁴ DEIR, p. 73.

⁵ Morrison ML. 2002. Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring. Island Press: Washington (DC). pp. 1 and 2. [emphasis added].

area, including constraints on reproduction and resource acquisition. As a result, the District has not acquired the site-specific information needed for a successful restoration plan.

Instead of collecting data and assessing ecological constraints, the District has simply assumed that replacing exotic plants with native ones would benefit native wildlife; that ecosystem functions and values would improve; and that habitats at the site would be "restored." These are not necessarily valid assumptions because habitat suitability is dictated by numerous biotic and abiotic factors besides vegetation. For example, because plants exhibit some redundancy in ecosystem function, exotic plant species can substitute in part for natives in performing a range of ecosystem functions, including wildlife support.⁶ Indeed, in some cases native wildlife species preferentially select exotic plants over native ones, and the factor limiting habitat suitability is entirely independent of plant species composition.⁷ Whereas I strongly support efforts to restore and enhance habitats in the Expansion area, the District should not attempt those efforts until it collects the data needed to gain a thorough understanding of existing habitat conditions and constraints.

Setback Distances

The DEIR provides inconsistent information on the setback distances for the wildlife observation platforms associated Patterson Slough:

- Page 45 of the DEIR states that the platforms would be setback a minimum of 100 feet from the edge of Patterson Slough. This conflicts with page 52 of the DEIR, which states that the platforms would be placed a minimum of 30 feet from the edge of Patterson Slough.
- Page 192 of the DEIR states that the platform on the west side of Patterson Slough would be set back a minimum of 100 feet from the edge of the riparian corridor. This is inconsistent with Figure 3-3B, which depicts the platform (and the platform on the east side of the slough) within the willow/riparian restoration area.

The setback distances that would be implemented for the wildlife observation platforms has implications on Project impacts to wildlife and sensitive natural communities. As a result, the District needs to clarify: (1) how far the platforms would be set back from Patterson Slough; (2) what the District considers to be "the edge" of Patterson Slough (e.g., top of bank, jurisdictional boundary, or other criteria); (3) how far the platforms would be set back from riparian habitat; and (4) whether the setback distances would be based on the existing vegetation communities, or the vegetation communities that will exist after restoration activities are completed.

PROJECT ALTERNATIVES

The Citizens Committee to Complete the Refuge, Friends of Coyote Hills, and Ohlone Audubon Society submitted scoping comments that requested the District analyze a Project alternative that: (a) relocates the proposed parking lot and picnic area to the south of Patterson Ranch Road SC-4 (Cont.)

⁶ Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.

⁷ Ibid.

and away from the sensitive willow grove habitat, and (b) removes the Patterson Slough east and west spur trails. In addition, the scoping letter urged the District to remove the Tule Lookout ("Wetlands View") spur trail because it would fragment habitat and bring human disturbance even closer to birds and wildlife utilizing the area.

The DEIR does not address an alternative that removes the Tule Lookout spur trail or the spur trail on the east side of Patterson Slough. However, it incorporates an alternative that eliminates the spur trail on the west side of Patterson Slough and relocates the parking and picnic areas to the south side of Patterson Ranch Road. The DEIR provides the following rationale for rejecting this alternative:

As discussed in Chapter 4.1 Biological Resources, all biological impacts of the Proposed Project, including the parking and picnic areas north of Patterson Ranch Road, would be reduced to a less-than-significant level by mitigation measures identified in the EIR. The same mitigation measures applied to this alternative would similarly reduce biological impacts to a less-than-significant level. Thus, this alternative would not be better than the Proposed Project in terms of impacts on biological resources. However, unlike the Proposed Project, this alternative would eliminate approximately 1.5 acres of agricultural land. This would conflict with the Proposed Project's objective of "Providing opportunities for urban agriculture" and may potentially conflict with City of Fremont General Plan Goals, and Open Space and Agriculture Easement conditions.⁸

There are two reasons why the DEIR's rationale is not supported by substantial evidence:

First, despite the DEIR's claim, it did not analyze "all biological impacts" associated with the parking and picnic areas. Specifically, the DEIR did not analyze impacts to adjacent habitat due to human disturbance, noise, dogs, and attraction of nuisance species—*all of which were identified as potentially significant impacts in the scoping letter*. Because the DEIR fails to provide a mitigation and monitoring plan for these potentially significant impacts associated with the parking and picnic areas, it does not have the basis for its conclusions that: (a) all impacts would be reduced to a less-than-significant level, and (b) relocating the parking and picnic areas would not be better than the Proposed Project in terms of impacts on biological resources.

Second, relocating the picnic and parking areas to the south side of Patterson Ranch Road would eliminate only 1.5 acres of agricultural land in the 45-acre Agricultural Unit. Because 43.5 acres of agricultural land would remain, an alternative that relocates the picnic and parking areas to the Agricultural Unit would not conflict with the Project's objective of "providing opportunities for urban agriculture."

The DEIR provides the following rationale for rejecting an alternative that eliminates the Patterson Slough Overlook (West-side) Spur Trail:

The proposed alignment of the Patterson Slough Overlook (West-side) Spur Trail and Wildlife Observation Platform is located along an existing dirt road to farm labor housing that formerly existed on the Project site. This existing road would remain in place even if the Patterson Slough West Spur Trail is eliminated from the Project and continue to be used for site management, including weed suppression, fire fuels reduction, and mosquito and vector control access. ... all biological impacts of the Proposed Project, including the

SC-6 (Cont.)

⁸ DEIR, p. 192.

Patterson Slough Overlook (West-side) Spur Trail, would be reduced to a less-thansignificant level by mitigation measures identified in the EIR. For these reasons, elimination of the Spur Trail would not substantially reduce the Project's impacts on biological resources.⁹

I understand that the Patterson Slough Overlook (West-side) Spur Trail would be located along an existing dirt road that would continue to be used for site management. However, building a wildlife observation platform at the end of the road (trail), and opening the road to public use, would cause more severe impacts to wildlife than if it is used for site management purposes only. Presumably, current use of the road is infrequent and consists primarily of personnel in vehicles (e.g., conducting visual inspections). Several studies have shown that vehicles act as a "mobile blind," and thus, cause less disturbance to wildlife than pedestrians.¹⁰ Even if current use of the road entails periodic use by pedestrians, the associated impacts are not comparable to those that would be caused by daily use by the public. As a result, the DEIR's conclusion that elimination of the Spur Trail would not substantially reduce the Project's impacts on biological resources is not supported by substantial evidence.

ENVIRONMENTAL SETTING

Numerous special-status plant and animal species have the potential to occur at the Project site.¹¹ A rare plant survey was conducted in the southern portion of the Project site in 2016.¹² All other protocol-level surveys that have been conducted at the Project site are at least 12 years old.¹³

Current data from protocol-level surveys are required to fully assess existing conditions, analyze Project impacts, and formulate appropriate mitigation. Specifically, current data are essential to a proper understanding of the abundance and distribution of special-status species that occur at the site, and thus, the feasibility of various mitigation options (e.g., impact avoidance). Deferring the surveys until after completion of the CEQA review process—as proposed in the DEIR—precludes proper understanding of the magnitude and severity of the Project's impacts. It also effectively robs the public, resource agencies, and scientific community from being able to submit informed comments pertaining to Project impacts and mitigation, and from having those comments vetted during the environmental review process.

The DEIR requires pre-construction, protocol-level surveys for select special-status species. However, the surveys will be conducted after the CEQA review process terminates, and they will be limited to areas where construction disturbance will occur. There are two problems with this approach:

First, conducting the surveys after the CEQA review terminates severely limits the District's

SC-8 (Cont.)

⁹ Ibid.

¹⁰ Holmes TL, RL Knight, L Stegall, GR Craig. 1993. Responses of Wintering Grassland Raptors to Human Disturbance. Wildlife Society Bulletin 21:461-468. *See also* Guay P, EM McLeod, AJ Taysom, MA Weston. 2014. Are vehicles 'mobile bird hides'?: A test of the hypothesis that 'cars cause less disturbance.' Victorian Naturalist 131(4):150-156. *See also* Ruddock M, DP Whitfield. 2007. A Review of Disturbance Distances in Selected Bird Species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage. 181 pp.

¹¹ DEIR, Tables 4.1-1 and -2.

¹² DEIR, p. 100.

¹³ DEIR, p. 90.

ability to modify Project features to avoid significant impacts. At a minimum, protocol-level surveys of areas where direct disturbance is proposed need to be conducted prior to approval of the Proposed Project. This will enable the District to reconfigure Project features to avoid and minimize significant impacts to any special-status species that occur within the currently proposed disturbance footprint.

Second, confining the protocol surveys to areas proposed for direct disturbance precludes a thorough understanding of baseline conditions throughout the entire Expansion area, and thus, the ability to evaluate whether management of the Expansion area is "protecting and/or enhancing biological resources" (which is one of the District's stated objectives).¹⁴

California Red-legged Frog and California Tiger Salamander

The Project site provides potential habitat for the California red-legged frog and California tiger salamander.¹⁵ The DEIR concludes both of these species have a low potential of occurring because they were not observed in the Project area during previous protocol surveys.¹⁶ However, protocol surveys for the California red-legged frog were conducted 12 years ago, and protocol surveys for the California tiger salamander were conducted 16 years ago.¹⁷ As a result, the survey results are very outdated and do not necessarily reflect current conditions.¹⁸ This is important because the DEIR does not assess impacts to, or incorporate mitigation for, either species. Because protocol surveys have not been conducted to verify that the California red-legged frog and California tiger salamander are still absent from the Project site, impacts to these species remain unexamined and potentially significant.

Special-Status Plants

The DEIR lists three special-status plant species that were detected in the southern part of the Project area in 2016: Congdon's tarplant, lesser saltscale, and San Joaquin spearscale.¹⁹ However, the DEIR provides no information on the abundance and distribution of those plants, nor does it provide a map that depicts where the plants were detected. This precludes a thorough understanding of existing conditions and the potential that the Proposed Project would have significant impacts on special-status plant populations.

PROJECT IMPACT ISSUES

Recreation and Human Activity

One of the reasonably foreseeable outcomes of the Project is a considerable increase in human activity within and adjacent to wildlands that provide habitat for various special-status plant and

SC-9 (Cont.)

SC-10

¹⁴ DEIR, p. 43.

¹⁵ Questa Engineering Corporation. 2018. Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report. Table 3.4-1.

¹⁶ DEIR, Table 4.1-1.

¹⁷ DEIR, p. 90.

¹⁸ U.S. Fish and Wildlife Service. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. p. 1.

¹⁹ DEIR, Table 4.1-2.

animal species. Recreation, and human presence in general, can have negative ecological impacts to ecosystems, plants, and wildlife. Those impacts can include: trampling, soil compaction, erosion, disturbance (due to noise and motion), pollution, nutrient loading, and the introduction of invasive plant species.²⁰

Wildlife can be affected by recreation in a variety of ways, including direct and indirect mortality, lowered productivity, reduced use of habitat (or preferred habitat), and aberrant behavior (or stress) that in turn results in reduced reproductive or survival rates.²¹ Studies have shown that recreational trails as narrow as one to three meters wide can have negative impacts on breeding birds.²² Negative impacts include decreased nesting near trails, altered bird species composition near trails, and increased nest predation by cowbirds, skunks, racoons and foxes using the clearings as corridors. The zone of influence of trails appears to be about 75 meters, although it may extend farther for some species.²³

Impacts associated with recreation and increased human activity at the Project site are potentially significant. Indeed, Schlesinger et al. (2008) concluded that disturbance from human activity is the most important factor affecting the number of bird species, surpassing even the effects from habitat loss due to development.²⁴ Losos et al. (1995) reported that hiking is the recreation type having the second most negative impact on threatened and endangered species.²⁵ Incredibly, the DEIR fails to provide any analysis of potentially significant impacts associated with recreation and increased human activity at the Project site. As a result, the DEIR fails to provide evidence that all potentially significant impacts to sensitive biological resources would be mitigated to less than significant levels.

Dogs

Dogs negatively impact wildlife in three ways: (1) by causing direct mortality of wildlife through predatory action, (2) by disrupting normal behavior, which can affect population parameters (e.g., reproductive success), and (3) through disease transmission.²⁶ These impacts can be significant, especially to special-status species, which are generally more prone to population decline.²⁷

SC-12 (Cont.)

²⁰ Jordan M. 2000. Ecological Impacts of Recreational Use of Trails: A Literature Review. 6 pp. *See also* Richardson CT, CK Miller. 1997. Recommendations for Protecting Raptors from Human Disturbance: A Review. Wildlife Society Bulletin 25(3):634-638.

²¹ Purdy KG, GR Goff, DJ Decker, GA Pomerantz, NA Connelly. 1987. A Guide to Managing Human Activity on National Wildlife Refuges. Human Dimensions Research Unit, Department of Natural Resources, Cornell University, Ithaca, New York, USA. *See also* Richardson CT, CK Miller. 1997. Recommendations for Protecting Raptors from Human Disturbance: A Review. Wildlife Society Bulletin 25(3):634-638.

²² Miller SG, RL Knight, CK Miller. 1998. Influence of Recreational Trails on Breeding Bird Communities. Ecological Applications 8(1):162-169.

²³ *Ibid*.

²⁴ Schlesinger M, P Manley, M Holyoak. 2008. Distinguishing Stressors Acting on Land bird Communities in an Urbanizing Environment. Ecology, 89(8):2302-2314.

²⁵ Losos E, J Hayes, A Phillips, D Wilcove, C Alkire. 1995. Taxpayer-Subsidized Resource Extraction Harms Species. BioScience 45(7): 446-455.

 ²⁶ Weston MA, JA Fitzsimons, G Wescott, KK Miller, KB Ekanayake, T Schneider. 2014. Bark in the park: A review of domestic dogs in parks. Environmental Management 54:373-382.
 ²⁷ *Ibid.*

The LUPA provides inconsistent information on dog regulations in the Expansion area. It states the District would:

Designate that all enhanced and restored seasonal wetlands, marshes, streams and water bodies, and all areas of existing and restored willow thicket and mixed riparian forest along and adjacent to Patterson Slough in the Patterson Slough Natural Unit, be considered as "marsh" and be "prohibited for entry by dogs," whether on leash or not... For all other areas within the Park Expansion area, including the Western Wetlands and Southern Wetlands Natural Units, require that dogs be on leash (leash rules apply). There would be no leash optional open areas.²⁸

However, it also states:

The *entire Regional Park Expansion area* would be designated as a "Leash Required Area" for Park visitors with dogs. Signage and fencing would be used to keep Park visitors, including dogs on trails and other designated public areas and out of sensitive resource areas.²⁹

Even if the District intends to exclude dogs from all sensitive resource areas, there are four reasons why the measures proposed in the LUPA (and DEIR) would not eliminate the potentially significant impacts dogs would have on wildlife:

First, several studies have shown low compliance with leash laws at parks.³⁰ This is consistent with my observations at parks managed by the District. The DEIR appears to acknowledge the problem of non-compliance with the District's leash ordinance. It states: "[s]ignage and fencing would be used to keep Park visitors, *including un-leashed dogs*, on trails and other designated public areas and out of existing and restored habitat."³¹

Second, signage is relatively ineffective. Pet owners frequently allow their dogs to run off-leash even where it is clearly signed that dogs are not permitted or are only permitted if on a leash.³²

Third, the fencing proposed in the DEIR would not preclude dogs from entering sensitive resource areas. According to the DEIR, the "field fencing" between the trails and sensitive resource areas³³ "will allow wildlife unimpeded movement."³⁴ If this statement is correct, the fencing will also allow unimpeded movement of dogs.

SC-13 (Cont.)

²⁸ LUPA, pp. 110 and 111.

²⁹ LUPA, p. 75. [emphasis added].

³⁰ Weston MA, JA Fitzsimons, G Wescott, KK Miller, KB Ekanayake, T Schneider. 2014. Bark in the park: A review of domestic dogs in parks. Environmental Management 54:373-382. *See also* Jorgensen JG, MB Brown. 2017. Evaluating Persuasive Messages to Influence Dog Leash Law Compliance at a Public Area in the Great Plains. Great Plains Research 27:131-142. *See also* Jorgensen JG, M Bomberger Brown. 2014. Piping Plovers *Charadrius melodus* and dogs: compliance with and attitudes toward a leash law on public beaches at Lake McConaughy, Nebraska, USA. Wader Study Group Bulletin 121(2):7–12.

³¹ DEIR, p. 42. [emphasis added].

³² United States Fish and Wildlife Service. 2007. Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*). Sacramento, California. xiv + 751. *See also* Jorgensen JG, M Bomberger Brown. 2014. Piping Plovers *Charadrius melodus* and dogs: compliance with and attitudes toward a leash law on public beaches at Lake McConaughy, Nebraska, USA. Wader Study Group Bulletin 121(2):7–12. ³³ DEIR, p. 49.

³⁴ DEIR, p. 123.

Fourth, because many wildlife species view dogs as a threat, even leashed dogs can have an adverse impact on wildlife.³⁵ Banks and Bryant (2007) showed that dog walking in woodland leads to a 35% reduction in bird diversity and a 41% reduction in abundance, both in areas where dog walking is common and where dogs are prohibited.³⁶ Based on their review of 133 publications, Weston et al. (2014) reported: "[s]tudies presenting results on how wildlife reacts to dogs report that flushing behavior of mammals and birds is usually greater when pedestrians are accompanied by a dog compared to pedestrians walking alone."³⁷

The DEIR fails to disclose or analyze potentially significant impacts associated with allowing dogs in the Expansion area. Because the measures incorporated into the LUPA and DEIR would not prevent impacts associated with dogs, potentially significant impacts to special-status wildlife remain unmitigated.

Mesopredators

Implementation of the Project would enhance conditions favorable for native and non-native mesopredators (i.e., smaller carnivores such as raccoons, skunks, foxes, and domestic cats).³⁸ These predators can decimate birds and other prey communities.³⁹ For example, Crooks and Soulé (1999) examined the effect of domestic cats and other mesopredators on scrub-breeding bird diversity in 28 habitat fragments located in coastal, urban San Diego County.⁴⁰ Their data revealed that most outdoor cats (84%) killed wildlife, and on average, each outdoor cat that hunted returned 24 rodents, 15 birds, and 17 lizards to the residence each year.⁴¹ The researchers concluded that: (a) this level of bird predation appeared to be unsustainable, and (b) even modest increases in predation pressure from cats and other mesopredators, in conjunction with other fragmentation effects, may quickly drive native prey species, especially rare ones, to extinction.⁴² As a result, the District must analyze how Project features (e.g., the picnic area) and outcomes (e.g., overall increase in human presence) would augment predator populations. It then must analyze the potential consequences of the augmented predator populations on biological resources occurring in the Project area. Because the DEIR does not incorporate mitigation for potentially significant impacts associated with an increase in mesopredator populations, the District does not have the basis for its conclusion that Project impacts on migratory birds and special-status animals would be less than significant.

SC-13 (Cont.)

³⁵ Banks PB, JV Bryant. 2007. Four-legged friend or foe? Dog walking displaces native birds from natural areas. Biology Letters 3:611-613. *See also* Lord A, JR Waas, J Innes, MJ Whittingham. 2001. Biological Conservation 98:233-240.

³⁶ Ibid.

³⁷ Weston MA, JA Fitzsimons, G Wescott, KK Miller, KB Ekanayake, T Schneider. 2014. Bark in the park: A review of domestic dogs in parks. Environmental Management 54:373-382.

³⁸ Jordan M (*and references therein*). 2000. Ecological Impacts of Recreational Use of Trails: A Literature Review.6 pp.

³⁹ Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.

⁴⁰ Crooks KR, ME Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563-566.

⁴¹ *Ibid*.

⁴² *Ibid*.

Brown-headed Cowbird

The brown-headed cowbird is an obligate brood parasite that is known to parasitize the nests of over 200 bird species.⁴³ Cowbird parasitism contributes to lowered productivity in host species through direct destruction of host eggs; through competition between cowbird and host chicks, resulting in increased mortality; and through nest abandonment in some species, thus lowering overall fecundity within a season.⁴⁴ Combined with increasing rates of habitat loss and fragmentation, parasitism by cowbirds can pose serious threats to already declining avian species. Nest parasitism by cowbirds has been identified as a threat to several of the special-status species that occur in the Project area (e.g., Alameda song sparrow, yellow warbler).⁴⁵

The Proposed Project would benefit the brown-headed cowbird in two ways. First, cowbirds are frequently associated with anthropogenic features, including parks, picnic areas, and internal and external edges created by development.⁴⁶ The Park Development Plan would introduce these features, which would support and attract cowbirds. Second, agriculture and grazing associated with the Project would benefit cowbirds by providing ample foraging habitat close to habitat for breeding songbirds (i.e., host nests for parasitism).⁴⁷

The DEIR fails to disclose, analyze, or provide mitigation for potentially significant impacts associated with an increase in brown-headed cowbirds at the Project site. As a result, the DEIR does not ensure that all potentially significant impacts to special-status birds would be mitigated to less than significant levels.

Special-Status Plants

The impacts analysis section of the DEIR (Impact BIO-1c) provides information on: (a) the legal status of special-status plants; (b) the special-status plant species that occur south of Line P/Ardenwood Creek; and (c) other special-status plants that have the potential to occur in the Project area.⁴⁸ Whereas this information is informative, the actual analysis of Project impacts to special-status plants is limited to the following:

⁴³ U.S. Department of the Interior, Bureau of Reclamation. 2004. Brown-headed Cowbird Management Techniques Manual. p. 1.

⁴⁴ Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 16.

⁴⁵ Shuford WD, T Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

⁴⁶ U.S. Department of the Interior, Bureau of Reclamation. 2004. Brown-headed Cowbird Management Techniques Manual. p. 11.

⁴⁷ Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 16. *See also* Robinson SK, JA Grzybowski, SI Rothstein, MC Brittingham, LJ Petit, FR Thompson. 1993. Management implication of cowbird parasitism on neotropical migrant songbirds. *In* DM Finch, PW Stangel (eds.). Status and management of neotropical migratory birds. Gen. Tech. Rep. RM229. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station. Fort Collins, CO.

⁴⁸ DEIR, pp. 109 and 110.

Construction of the flood control and wetlands mitigation project elements south of Ardenwood Creek/Line P in the Southern Wetlands Natural Unit, which includes vegetative disturbance and clearing, excavation, and soil removal to create new wetlands basins would destroy any rare plants that occur in this area. Any temporary construction disturbance of habitat areas adjacent to Patterson Ranch Road and Tuibun Trail where road and utility improvements are proposed could potentially damage or destroy any rare plants that occur. This represents a *potentially significant* impact.⁴⁹

The flood control and wetlands mitigation project elements in the Southern Wetlands Natural Unit have already been approved (permitted), and thus, they do not appear to be relevant to CEQA review for the Proposed Project. Nevertheless, Project impacts to special-status plants in the other two units are not limited to *temporary* construction disturbance of habitat areas adjacent to Patterson Ranch Road and Tuibun Trail where road and utility improvements are proposed. The Project also has the potential to cause *permanent* impacts to special-status plants during construction of the parking lot, picnic area, wildlife observation platforms, trails, and other Project elements. Furthermore, habitat restoration and enhancement activities could directly impact special-status plants through inadvertent removal or trampling, or indirectly through shading, competition, and habitat type conversion.

I recognize that many of the Proposed Project elements would be constructed in ruderal habitat or along existing maintenance roads. In general, this is an ecologically appropriate approach for minimizing impacts. However, the District cannot simply assume that constructing Project features in previously disturbed areas would avoid or minimize impacts to special-status plants (and other sensitive biological resources). Some special-status plants tolerate, or even thrive at, disturbed sites. For example, Congdon's tarplant, which is one of the special-status plants that was detected in the Southern Wetlands Natural Unit, is commonly associated with disturbed sites. Because the DEIR fails to disclose and analyze all potentially significant impacts to special-status plants, it fails its obligations as an informational document that informs resource agencies and the public of the Project's potential environmental effects.⁵⁰

Special-Status Birds

The DEIR's analysis of impacts to special-status birds concludes with the following statements:

In the long term, implementation of the Project would have a beneficial effect on eagles, raptors, and Special Status and migratory birds by expanding areas of willow and riparian habitat, oak savanna, and improving plant community diversity and habitat quality in currently ruderal areas. This would result in an increase in food supply for prey animals and an improvement in foraging and nesting habitat for raptors, and other Special Status and migratory birds.⁵¹

These statements improperly generalize the Project's benefits to special-status birds. Whereas the expansion of riparian habitat and oak savanna may benefit species associated with those habitat types, it could adversely affect species associated with open (treeless) habitat types (e.g., burrowing owl, ferruginous hawk). In addition, some bird species (e.g., eagles) are extremely intolerant of human activity. Fletcher et al. (1999) studied the effects of recreational trails on

⁴⁹ DEIR, p. 110.

⁵⁰ See Cal Code Regs. tit. 14 § 15121.

⁵¹ DEIR, p. 113.

wintering diurnal raptors along riparian corridors in a Colorado grassland. They found that human activity associated with recreational trails had a statistically significant negative effect on raptor species richness, abundance, and perch use.⁵² Thus, even if implementation of the Project would "improve" habitat, the increase in human activity associated with the Project could functionally eliminate that habitat.

As Morrison (2002) and others have pointed out, the success of a habitat restoration project should be judged by how wildlife species respond to it.⁵³ The DEIR does not incorporate any performance standards for wildlife response to the proposed restoration and enhancement program, or to the Project as a whole. Similarly, it does not incorporate a monitoring program to assess wildlife response to the Project, and thus, whether adaptive management is needed to achieve wildlife conservation objectives. As a result, the DEIR provides no assurances that implementation of the Project would have a beneficial effect on eagles, raptors, special-status birds, or any other wildlife taxa.

Cumulative Impacts

CEQA Guidelines § 15130(b)(3) state: "[1]ead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." The District's cumulative impacts analysis fails to provide an explanation for the geographic limitation used in the DEIR. In addition, although the DEIR identifies other projects "in the vicinity" of the Project site, it does not define "vicinity," which is a subjective term. ⁵⁴ This precludes understanding of the geographic scope, and thus, the appropriateness of the geographic limitation that was applied to the District's cumulative impacts analyses.

The Project will allow public access onto lands that are currently closed to the public. As discussed previously, this increase in human activity has the potential to cause significant impacts on biological resources. Although the DEIR acknowledges there are related projects that also would increase public access, it provides no analysis of impacts to biological resources due to the cumulative increase in public access.⁵⁵

The DEIR concludes that there is a significant cumulative impact on biological resources.⁵⁶ However, it further concludes:

The Proposed Project's design, and implementation of mitigation measures identified above, would reduce the impacts of the project on sensitive biological resources to a lessthan-significant level, and thus would serve to address Project-related contribution to cumulative impacts on biological and wetland resources. Therefore, the Proposed Project SC-17 (Cont.)

⁵² Fletcher R, S McKinney, C Bock. 1999. Effects of Recreational Trails on Wintering Diurnal Raptors along Riparian Corridors in a Colorado Grassland. J. Raptor Research 33(3):233-239.

⁵³ Morrison ML. 2002. Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring. Island Press: Washington (DC). p. 1. *See also* Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 142.

⁵⁴ DEIR, pp. 127 and 128.

⁵⁵ DEIR, p. 128.

⁵⁶ DEIR, pp. 129 and 196.

would not have a cumulatively considerable impact on biological resources because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. The cumulative impact of the Proposed Project on biological resources would be less than significant.⁵⁷

This is not proper cumulative impacts analysis. Implementation of mitigation measures does not guarantee impacts are mitigated to less-than-significant levels. Indeed, several studies have demonstrated that most mitigation measures fail from a functional perspective, or are never implemented.⁵⁸ Furthermore, just because a project successfully mitigates its impacts to less-than-significant levels does not mean that no impacts whatsoever were generated by that project. The purpose of cumulative impacts analysis is to determine whether impacts that were deemed less than significant at the project-level are, in fact, significant when looked at as a whole. In other words, just because the District has concluded that all Project impacts would be mitigated to a less-than-significant level does not automatically mean that the Project's incremental contribution to the significant cumulative impact would not be considerable.

For example, the Project may eliminate bat roosts. The District has concluded that this impact would be less than significant because the DEIR incorporates measures to avoid direct impacts to bats associated with the roosts. Even if that conclusion is valid, there would be residual impacts to bats because the DEIR does not require replacement of any roosts that are eliminated by the Project. The availability of suitable roost sites is the limiting factor for most bat populations.⁵⁹ Therefore, if each of the six cumulative projects listed in the DEIR eliminated one or more bat roost—without replacement—the cumulative impact could be very significant, and the Project's contribution to that impact would be cumulatively considerable.

MITIGATION ISSUES

BIO-1a (General Conservation Measures)

Holes and Trenches

The DEIR proposes the following mitigation for the entrapment hazard associated with Project holes and trenches:

Before steep-walled holes or trenches are back filled, they shall be inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted to determine the appropriate method for relocation.⁶⁰

SC-18 (Cont.)

⁵⁷ DEIR, p. 129.

⁵⁸ Fiedler PL. 1991. Mitigation-related transplantation, relocation and reintroduction projects involving endangered and threatened, and rare plant species in California. Final Report. Available at:

<nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3173>. See also Ambrose RF. 2000. Wetland Mitigation in the United States: Assessing the Success of Mitigation Policies. Wetlands (Australia), 19:1-27. See also United States General Accounting Office. 2001. Endangered Species Act: Fee-Based Mitigation Arrangements. GAO-01-287R Endangered Species Act Mitigation. p. 3.

⁵⁹ Western Bat Working Group. 2005 (Update). Species Accounts. Available at: http://wbwg.org/western-bat-species>.

⁶⁰ DEIR, p. 108.

The proposed mitigation is insufficient to ensure impacts associated with holes and trenches are mitigated to less-than-significant levels. Holes and trenches serve as a pitfall trap for wildlife that often are unable to escape after they inadvertently fall into the hole or trench.⁶¹ Animals that are entrapped in holes or trenches are subject to heightened mortality due to predation, exposure, drowning, or entombment.⁶² Mortality of wildlife (especially special-status species) is a potentially significant impact. The potential for mortality increases with the amount of time the animal is trapped in the hole or trench. The proposed mitigation would not minimize mortality because it would only be conducted before backfilling the holes and trenches. To minimize mortality, escape ramps should be installed in any holes or trenches that are left open overnight, and those holes and trenches should be inspected for trapped animals on a daily basis.

BIO-1b (Habitat Mitigation and Monitoring Plan)

The Habitat Mitigation and Monitoring Plan ("HMMP" or "Plan") proposed in MM BIO-1b is a critical component of the District's mitigation strategy. According to the DEIR:

To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for implementing the Plan. The Plan shall include by proportionate amounts, specific habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed riparian, willow sausal, seasonal wetlands, etc).⁶³

This measure is vague and improperly defers the specific actions that will be implemented to reduce impacts to less than significant levels. In this case, MM BIO-1b defers: (a) details on how disturbed areas would be restored, (b) identification of the parties responsible for implementing the Plan, and (c) the habitat compensation ratio. This issue is exacerbated by the DEIR's failure to provide any information on the monitoring component of the Plan, including the monitoring methods, frequency, and duration.

CEQA specifically prohibits deferral of mitigation that a lead agency relies on for its conclusion of insignificance unless the lead agency: (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure, and (4) demonstrates in the record that a detailed description of the mitigation measure(s) was impractical or infeasible during the Project's environmental review phase.⁶⁴ The DEIR fails to satisfy these requirements.

SC-19 (Cont.)

⁶¹ Doody JS, P West, J Stapley, et al. 2003. Fauna by-catch in pipeline trenches: conservation, animal ethics, and current practices in Australia. Australian Zoologist 32(3):410-419. *See also* Swan G, S Wilson. 2012. The results of fauna recovery from a gas pipeline trench, and a comparison with previously published reports. Australian Zoologist 36(2):129-136.

⁶² Ibid.

⁶³ DEIR, p. 109.

⁶⁴ Cal Code Regs. tit. 14 § 15126.4.

MM BIO-1b states the District shall prepare and implement a HMMP "as required by regulatory permit conditions." The District cannot rely on unspecified permit conditions and future permitting actions conducted by other agencies to conclude that impacts would be mitigated to less-than-significant levels. According to CEQA Guidelines, that approach is only permissible if: "compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards."⁶⁵ The DEIR does not satisfy these criteria because it does not provide: (a) specific biological performance standards (success criteria) for the habitat restoration activities, or (b) substantial evidence that compliance with the regulatory permit would reduce significant impacts to less-than-significant levels.

BIO-1c (Special-Status Plants)

Mitigation Measure BIO-1c requires protocol-level surveys for special-status plants prior to construction. According to the DEIR: "[i]f initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species."

The proposed measure is insufficient because it improperly defers formulation of the buffer size needed to avoid impacts to special-status plants. This precludes the public and resource agencies from being able to submit comments on the adequacy of the buffers that will be implemented for the Project. Furthermore, because the DEIR does not establish any minimum qualifications for the "Qualified Botanist," the District does not have the basis for assuming the botanist would be qualified to make decisions on the buffer size needed to avoid potentially significant impacts to special-status plants. This issue is exacerbated by the DEIR's failure to provide any performance standards for the mitigation. As a result, the District must provide: (a) minimum buffer sizes for special-status plants, (b) evidence that those buffer sizes would be sufficient to maintain ecological processes and microhabitat conditions needed to sustain the target population(s), and (c) performance standards for "protected" plant populations.

According to the DEIR:

If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 ratio based on the area of lost habitat (accurately field measured). Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas.

There are several problems with the District's proposed mitigation strategy:

First, the DEIR provides no evidence that the special-status plants that may be impacted by the Project can be successfully salvaged and relocated (or propagated from seed). Fiedler (1991) conducted a thorough review of mitigation-related transplantation, relocation and reintroduction

SC-20 (Cont.)

⁶⁵ Ibid.

attempts involving special-status plants in California.⁶⁶ She reported that only 8 of the 53 (15%) attempts reviewed in her study should be considered fully successful.⁶⁷ Although Fiedler reported several causes for the failed attempts, the common result was that the plants died. Before making a conclusion on the ability to salvage and relocate plants to mitigate significant Project impacts, the District must first provide evidence that potentially impacted plants can be successfully salvaged and relocated (or propagated).

Second, the 1:1 mitigation ratio proposed in the DEIR is insufficient because it does not account for uncertainty inherent in restoration projects (i.e., the possibility that restoration efforts will not be entirely successful). State and federal agencies have acknowledged the inherent uncertainty in restoration and creation projects, and as a result, recommend incorporating a mitigation ratio that is commensurate with the risk that the restoration project will not achieve its goals.⁶⁸

Third, habitat enhancement is defined as: "the manipulation of the physical, chemical, or biological characteristics of a habitat to change a specific function or seral stage of the habitat."⁶⁹ Thus, by definition, "habitat enhancement" means habitat for the given species already exists within the enhancement area. As a result, the District's proposal for "enhancement" as a potential means for mitigating impacts to special-status plants would result in a net loss of special-status plant species habitat. Consequently, any enhancement activities that are conducted as compensatory mitigation warrant a mitigation ratio much greater than 1:1.

Fourth, the DEIR appears to allow impacts to occur prior to completion of the mitigation efforts.⁷⁰ This is important because the DEIR fails to establish the contingency measures that would be required if the mitigation is unsuccessful. Consequently, the District must establish a mechanism that guarantees significant impacts to special-status plants are successfully mitigated to less-than-significant levels.

The DEIR proposes the following performance standards for the special-status plant mitigation: "[r]estored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years." These are appropriate performance standards. However, the District needs to identify the time frame for achieving these standards. It also needs to identify the remedial actions that will be taken if the District is unable to achieve the performance standards within the designated time frame.

⁶⁸ 81 FR 61031. *See also* California State Water Resources Control Board. 2013 Jan 28. Preliminary Draft Water Quality Control Policy for Wetland Area Protection and Dredged or fill Permitting. 26 pp. *See also* U.S. Environmental Protection Agency. 1990. Memorandum of Agreement between the Department of the Army and The Environmental Protection Agency: Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines. Available at: https://www.epa.gov/cwa-404/memorandum-agreement>.

⁶⁹ 16 USCS § 3772 (2), [Title 16. Conservation; Chapter 57B. Partners for Fish and Wildlife].

SC-21 (Cont.)

⁶⁶ Fiedler PL. 1991. Mitigation-related transplantation, relocation and reintroduction projects involving endangered and threatened, and rare plant species in California. Final Report. Available at: <nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3173>.

⁶⁷ Ibid.

⁷⁰ LUPA, p. 84.

Mitigation Measure BIO-1c concludes with the statement that: "[t]he final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the project Habitat Mitigation and Monitoring Plan (HMMP) see BIO-1b." Whereas consulting with the California Department of Fish and Wildlife ("CDFW") is an appropriate action, CEOA mandates that the District identify in the DEIR the specific mitigation and monitoring plan needed to reduce impacts to less-thansignificant levels; it cannot defer that responsibility to the CDFW after the CEOA review process terminates. Furthermore, the CDFW has no independent authority to ensure success of the HMMP. Because the DEIR does not incorporate an enforcement mechanism, it provides no assurances that the HMMP would mitigate impacts to less-than-significant levels.

BIO-1d (Special-Status Birds)

The DEIR requires pre-construction surveys for nesting birds within 14 days prior to the ground disturbance and vegetation removal activities. According to the DEIR, surveys shall include, but not be limited to, the following species: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act.

Although the DEIR does not identify the number of surveys that would be required, it suggests only a single survey may be conducted (i.e., "if the survey does not identify any nesting migratory birds...").⁷¹ Nest finding is labor intensive and can be extremely difficult due to the tendency of many species to construct well-concealed or camouflaged nests.⁷² As a result, a single pre-construction survey (or even two surveys) is insufficient for many of the species that could be directly or indirectly impacted by the Project. For example, song sparrow and common vellowthroat nests can be very difficult to locate. Locating nests for these species requires multiple surveys, and typically entails "spot mapping" and behavioral observations to identify nest territories. To ensure the proposed mitigation would be effective, the District needs to specify: (a) the number of surveys that would be conducted to locate bird nests, (b) the minimum level of effort (i.e., hours per unit area) that would be devoted to the surveys, and (c) the techniques that should be used for the surveys.

Tricolored Blackbird

The California Fish and Game Commission recently listed the tricolored blackbird as a threatened species. Tricolored blackbirds are highly colonial and have been reported to breed in groups exceeding 100,000 nests.⁷³ As a result, impacts to a nesting colony can have a substantial effect on the tricolored blackbird population.

SC-21 (Cont.)

⁷¹ DEIR, p. 114.

⁷² DeSante DF, GR Geupel. 1987. Landbird productivity in central coastal California: the relationship to annual rainfall and a reproductive failure in 1986. Condor. 89:636-653.

⁷³ Shuford WD, T Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Potential nesting habitat for the tricolored blackbird occurs along Patterson Slough, and the Kline and P-line channels.⁷⁴ The Proposed Project includes the creation of recreational trails along the P-line channel and a portion of Patterson Slough. Human disturbance can cause tricolored blackbirds to abandon their nesting colony.⁷⁵ The pre-construction nesting bird surveys proposed in the DEIR would enable the District to avoid impacts to any tricolored blackbird nest colonies during the construction phase of the Project. However, the DEIR does not incorporate any mitigation measures to avoid impacts to tricolored blackbird colonies due to human disturbance after the Expansion area is opened to the public. As a result, the DEIR does not ensure significant impacts to the tricolored blackbird are mitigated.

BIO-1f (Black Rail)

Mitigation Measure BIO-1f requires protocol-level surveys for black rails prior to construction. According to the DEIR: "[i]f active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows." It is extremely difficult to locate black rail nests, which are "almost always completely concealed by surrounding vegetation."⁷⁶ In addition, because black rails build their nests in dense vegetation at (or near) ground level,⁷⁷ biologists that attempt to locate an active nest may inadvertently crush the nest before locating it. As a result, mitigation that is contingent on finding active nests is not an effective strategy. Instead, the need for additional mitigation (i.e., setbacks, buffers, and work windows) should be based on the inferred nest location after multiple surveys have been conducted.

BIO-1g (Burrowing Owl)

Mitigation Measure BIO-1g requires protocol-level surveys for burrowing owls prior to construction. The DEIR states:

Burrowing owl surveys will be completed by a CDFW-approved Qualified Biologist for those portions of the Project area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols establish by CDFW and *may require multiple site visits* with the final survey completed no more than 14 days prior to initiation of construction activities.⁷⁸

The proposed mitigation is too vague to ensure burrowing owls that may be significantly impacted by the Project are located prior to construction activities. CDFW's Staff Report on Burrowing Owl Mitigation recommends four "detection surveys" during the breeding season, followed by two "take avoidance" surveys prior to construction.⁷⁹ The DEIR needs to identify whether the District will conduct these six surveys.

SC-23 (Cont.)

⁷⁴ DEIR, p. 93.

⁷⁵ Beedy EC, SD Sanders, D Bloom. 1991. Breeding Status, Distribution, and Habitat Associations of the Tricolored Blackbird (*Agelaius tricolor*) 1850-1989. Report to the US Fish and Wildlife Service, Sacramento, CA. p. 24.

⁷⁶ California Department of Fish and Game. 1987. Five-Year Status Report. p. 3.

⁷⁷ California Department of Fish and Wildlife. 1999. Black Rail [species account]. California Interagency Wildlife Task Group. CWHR version 9.0 personal computer program. Sacramento, CA.

⁷⁸ DEIR, p. 116. [emphasis added].

⁷⁹ California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. Appendix D.

According to the DEIR:

Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols.⁸⁰

There are several problems with the proposed mitigation:

First, the DEIR fails to identify how occupied burrowing owl habitat would be preserved and protected (it is not "noted above" as the DEIR claims). The absence of this information precludes the public from being able to evaluate whether the measures the District proposes to implement would indeed be effective in preserving and protecting burrowing owl habitat.

Second, the District's proposal to create and manage new burrowing owl habitat is too vague to be evaluated. Specifically, the DEIR fails to identify: (a) the habitat replacement ratio, and (b) how new habitat would be created and managed, including whether artificial burrows would be constructed and maintained.

Third, the DEIR fails to incorporate any performance standards for the mitigation (including standards for habitat that is preserved and protected, and for new habitat that is created).

Fourth, the DEIR fails to identify how the District would minimize potentially significant impacts to owls that occupy habitat that cannot be preserved and protected, including whether the District would exclude ("passively relocate") owls from their burrows. This is important because burrow exclusion is a potentially significant impact under CEQA that must be analyzed.⁸¹ In addition, CDFW's Staff Report on Burrowing Owl Mitigation states that burrowing owls should not be excluded from burrows unless or until: (a) a Burrowing Owl Exclusion Plan is developed and approved; (b) permanent loss of occupied burrows and habitat is mitigated in accordance with CDFW guidelines; (c) site monitoring is conducted prior to, during, and after exclusion of burrowing owls from their burrows; and (d) excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site.⁸²

BIO-1i (Special-Status Bats)

Preconstruction Survey

Mitigation Measure BIO-1i states: "[i]n advance of tree removal and dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site." The DEIR then identifies four mitigation measures that would be implemented if roosting habitat or active bat roosts are found during the preconstruction survey. Because the proposed mitigation is contingent on the results of the preconstruction survey, it is SC-25

(Cont.)

SC-26

⁸⁰ DEIR, p. 116.

⁸¹ California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation, p. 10.

⁸² *Ibid*, p. 11.

critical that: (a) the results are accurate, (b) the biologist locates all bat roosts that may be impacted by the Project, and (c) the biologist accurately identifies the status (e.g., active or not active) and function (e.g., maternity roost, day roost) of each roost.

Although the District's ability to effectively mitigate significant impacts to special-status bats is entirely dependent on the accuracy of the pre-construction survey, the DEIR fails to establish any standards for that survey other than that it should be conducted by a "Qualified Biologist" in advance of tree removal and dismantling of the Contractor's residence. However, the DEIR does not establish minimum qualifications for the "Qualified Biologist," nor does it establish a mechanism that ensures the biologist implements appropriate survey methods.

Bat surveys often require specialized equipment (e.g., acoustic monitors) or techniques (e.g., mist netting), and the methods that are effective for one species may be ineffective for other species.⁸³ An inappropriate or insufficient survey effort could lead to the false conclusion of absence, and consequently, significant impacts to bats. As a result, it is important that the public and resource agencies be given the opportunity to comment on the proposed survey methods to ensure those methods would be effective for the species that may occur at the Project site. Because the DEIR fails to establish standards for the preconstruction survey and the biologist that would conduct that survey, it provides no assurances that potentially significant impacts to bats would be mitigated to less-than-significant levels.

Mitigation

Some of the bat species that could occur at the Project site roost in colonies.⁸⁴ A single roost site can contain hundreds or thousands of bats (hereafter referred to as a "significant roost").⁸⁵ The availability of suitable roost sites is the limiting factor for most bat populations.⁸⁶ Thus, the loss of a significant roost site can have relatively severe implications on the overall population.

The DEIR allows the District to remove significant roost sites as long as removal occurs outside of the maternity and hibernation seasons. This would avoid direct impacts (e.g., mortality) to bats during critical times of the year. The DEIR, however, fails to incorporate any measures to mitigate indirect impacts associated with the loss of the roost site. Because suitable roost sites are the limiting factor for most bat populations, removing a tree or building with a significant roost (e.g., maternity roost) could have a significant impact on the population even if the feature is removed outside of the maternity season. Because the DEIR does not provide mitigation for indirect impacts associated with the loss of significant roosts, potentially significant impacts to special-status bats remain unmitigated. SC-26 (Cont.)

⁸³ Western Bat Working Group. 2017. Survey Matrix [online]. Available at: http://wbwg.org/matrices/survey-matrix/

⁸⁴ DEIR, pp. 94 and 95.

⁸⁵ Western Bat Working Group. 2005 (Update). Species Accounts. Available at: http://wbwg.org/western-bat-species>.

⁸⁶ Ibid.

Conclusion for Impact BIO-1

The DEIR's analysis of Project impacts to special-status species concludes with the following statement:

With the implementation of Mitigation Measures BIO-1a through BIO-1j, and compliance with Section 18.218.050(c), Standard Development Requirements of the City of Fremont Municipal Code, the impact of the Propose Project on species/habitat identified as a candidate, sensitive, Special Status species would be reduced to a less than significant level.⁸⁷

The District has no basis for this conclusion because it has not conducted the surveys needed to establish the presence, abundance, and distribution of special-status species at the Project site. Without this knowledge, the magnitude of impacts cannot be assessed. Moreover, the District's conclusion relies on the assumption that the proposed mitigation would reduce all potential impacts to less-than-significant levels regardless of the results of the pre-construction surveys. This assumption is unreasonable because it ignores the inherent uncertainty in predicting the results of biological surveys, and thus, knowledge that preconceived mitigation measures would be sufficient to mitigate impacts to whatever biological resources are discovered during those surveys. Furthermore, it ignores the fact that not all impacts are mitigatable to less-thansignificant levels. If this was the case, there would never be the need for a lead agency to issue a statement of overriding considerations.

This concludes my comments on the DEIR.

Sincerely,

Scott Cashen, M.S. Senior Biologist

⁸⁷ DEIR, p. 118.

Response to Comments SC-1 through SC-27

Response SC-1

This comment provides general background information and is noted. The Park District will consider this input prior to taking action on the EIR and LUPA.

Response SC-2

All of the Project objectives in the LUPA will be, or are currently being, implemented. Some of the objectives, such as management of invasive weeds and invasive animals, like the red fox and feral cats, are part of a current and ongoing management program and are therefore not included in the CEQA Project Description and Draft EIR analysis. All new LUPA objectives are incorporated into the CEQA Project Description and Draft EIR analysis.

See also Response SCSF1-23 for proposed LUPA expanded Objectives.

Response SC-3

The comment criticizes the adequacy of the Project objectives described in the Draft EIR. While the CEQA Guidelines do require an EIR to contain "[a] statement of the objectives sought by the proposed project," the Guidelines do not impose any substantive requirements for those objectives, other than that they must include the underlying purpose of the Project. CEQA Guidelines § 15124(b). This standard is met here.

See also Response SCSF1-23 for proposed LUPA expanded Objectives.

Response SC-4

The Draft EIR fully discusses Project activities and actions related to habitat protection, restoration, and enhancement at a level of detail needed to evaluate and analyze the impact of these actions on biological resources, soils, and hydrology, and to recommend appropriate mitigation measures. This level of detail is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project, and additional analysis is not required.

We agree with the commenter that detailed Restoration Plans are needed during the construction stage to provide direction for project implementation. The Restoration and Enhancement Construction Plans and Bid Documents would include all of the items listed in Comment SC-4.

Restoration activities will generally not require grading, and will consist of compost placement, seeding and native plant container planting, weed control and irrigation. These activities will not result in significant biological impacts, and will be offset by the enhancement and restoration of willow sausal, mixed riparian forest, oak savanna and wetlands. The final restoration plan will include all of the items listed in Comment SC-4 (See also response SC-20 below for Performance Standards).

The Park District is currently undertaking additional technical studies on the biology, soils, and groundwater hydrology and chemistry of the Project area to further develop information needed for

the Restoration Implementation Plan. This includes field plot trials of native trees and shrub species in differing soil salinity and soil moisture regimes, additional observations of plant communities, trials for control of invasive weed species and native grassland establishment and management, and soil and groundwater monitoring. The Park District is also exploring the establishment of a local native plant nursery that would propagate many of the native plant species recommended for restoration and enhancement, and collected largely from sources within the greater Alameda Creek Watershed. Sources of irrigation water for nursery and plant establishment, as well as irrigation system concepts, are being developed.

The specific restoration details, or information for the responsible agencies, the public and the Park District Board of Directors in approving the LUPA and FEIR to understand what the "Restoration Plan" will consist of is already described in the LUPA. The LUPA gives acreages of specific planned land cover types/vegetation communities, and shows their spatial relationship to proposed Park development and habitat type conversion. The plan calls for avoiding, revising project features such as trail alignments, and minimizing impacts to mapped wetlands and high value habitat and where this cannot be accomplished, an HMMP would be prepared for review and approval by regulatory agencies with jurisdiction over the Project. The LUPA, together with Mitigation Measure BIO-1b, have specific restoration targets and mitigation ratios which will reduce all identified biological impacts to less than significant.

Most of the Park expansion land cover is ruderal/weedy with relatively low habitat value, and the LUPA calls for these areas to be converted to land cover types with higher habitat values, for example, from ruderal to willow sausal or oak woodland, depending on soil and hydrologic conditions. If the Restoration and Enhancement Construction Plans fail to fully establish willow sausal or oak woodland and the land reverts to a more ruderal condition, there would not be a significant impact on biological resources. In other words, if the restoration fails, habitat value will not be degraded below pre-project conditions. The HMMP would contain contingencies to ensure that mitigation for identified biological impacts to wetlands and habitat for Special Status species is met.

The details of a "restoration plan" the commenter is asking for now instead comes out of the technical aspects of the subsequent design development phase of a project, after the decision making body (the Park District Board) has decided to proceed with the project. They will also take advantage of the additional technical field studies that are being completed within the Project area to further help development of the plan.

If the Park District were to expend funds and staff resources now before Park District Board sign off of the LUPA, Park Development Plan and CEQA, and if the Board decides they want to change, for example, the land cover types or public access amenity locations, this would be a waste of public funds because the Park District would have to develop new and revised plans. This approach of providing sufficient Project Plans for the public, responsible agencies, and Park District Board to understand the project, recommend any changes, analyze impacts and determine mitigation measures, and defer preparation of detailed restoration and enhancement plans. is not unique to the Park District.

See also Response CCCR-20.

Response SC-5

Page 52 of the Draft EIR is in error and page 45 is correct. The minimum setback distance for hardscape improvements is 100 feet. The setback is measured from the edge or (willow tree) dripline of Patterson Slough, not top of bank. The statement on page 192 refers to a 100-foot setback from the edge of the *existing* willow plant community, not a *future* restoration area.

The last paragraph of page 51 / first paragraph of age 52 of the Draft EIR is edited as follows:

Wildlife Observation Platform

Public access features such as wildlife observation platforms (Figure 3-8) or overlooks would be at grade or placed on fill in non-wetland areas, or on elevated decks with ADA compliant ramps. The wildlife observation platforms would use wood or composite materials, be 15 to 25 feet in length and width, and elevated 5 to 8 feet above adjacent grade on surface placed concrete pier blocks or pin piers. This would minimize soil disturbance and potential damage to any below-ground cultural resources. The wildlife observation platforms would be placed a minimum of 30 100 feet from the willow-vegetated edge of the existing Patterson Slough, with installation of fencing and native landscaping to provide physical and visual barriers and screening, in voluntary compliance with the City of Fremont Watercourse (stream) setback protection ordinance. This ordinance requires a minimum 30-foot setback.

Response SC-6

The purpose of alternatives analysis in CEQA is to evaluate alternatives to a Proposed Project that would reduce or eliminate the significant unavoidable impacts of the Proposed Project. Section 4.1 Biological Resources, on pages 65-129 of the Draft EIR, includes mitigation measures that would reduce all impacts on biological resources to a less-than-significant level.

An alternative of placing the parking area south of Patterson Ranch Road in an area where the LUPA proposed ongoing agriculture (climate smart farming) was also evaluated on page 192 of the DEIR.

See also Response FCH2-2.

The Project alternative proposed in the comment is not necessary to reduce the impacts of the Proposed Project to a less-than-significant level. Since the Tule Lookout Spur would be located on a proposed flood control maintenance road and in a ruderal area, with no significant impacts, an analysis of additional alternatives is not required. The baseline environmental conditions for assessment of impacts is the date of the Notice of Preparation (NOP), dated May 14, 2018. The proposed Tule Lookout Spur would be located in an area of existing ruderal grasslands, as is the Spur Trail on the east side of Patterson Slough.

Response SC-7

Disturbance impacts of trail users (including their dogs on leash) on the riparian resources of Patterson Slough and associated wildlife are discussed on page 118 (Impact BIO-2, Riparian Areas), as well as on page 124 in the discussion on habitat fragmentation and the potential disruption (and impacts) trail users have on wildlife habitat. Additional information has been added to page 124 of the DEIR specifically evaluating the potential impacts of leashed dogs on wildlife and Special Status bird species (see also Response SC-13 below).

The Draft EIR correctly points out that the environmental baseline for evaluation of trail and picnic user area user impacts (including visitors with dogs on leash), is the present weedy or ruderal nature of where these facilities are proposed, not impact on future, more sensitive restored habitat. Creek setbacks, landscaped berms, signage and fencing all would be used to keep park visitors and their animals away from sensitive areas, as discussed on pages 45 and 52 of DEIR.

Relocating the picnic and parking area to the south side of Patterson Ranch Road would have a larger impact on adjacent agricultural operations than the commenter stated. With landscaped buffers, stormwater treatment facilities, and overflow parking, the footprint of these facilities is estimated to be well over 5 acres, depending on final design. This area has recently been farmed in row crops and has an irrigation water supply, and is considered prime farm land. It is also within an agricultural easement area. Furthermore, relocating the picnic and parking area to the south side of Patterson Ranch Road will result in poor pedestrian circulation and safety because visitors will be forced to cross Patterson Ranch Road in order to access the highly popular Tuibun Trail -the main entry into the park. Relocating the Tuibun Trail to the south side of Patterson Ranch Road to the Visitor Center to avoid this design flaw would cause significant habitat destruction and not economically feasible.

Section 4.1 Biological Resources, on pages 65-129 of the Draft EIR, includes mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This analysis is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. It provides substantial evidence in compliance with CEQA, and additional analysis is not required.

As discussed on page 192 of the Draft EIR, an alternative that eliminates approximately 1.5 acres of agricultural land would reduce opportunities for urban agriculture, and therefore would conflict with the Proposed Project's objective of "Providing opportunities for urban agriculture," and may potentially conflict with City of Fremont General Plan Goals, and Open Space and Agriculture Easement conditions. For this reason, and because the "Eliminate Patterson Slough Overlook (West-side) Spur Trail and Relocate Parking and Picnic Areas Alternative" would be no better that the proposed Project in terms of impacts on biological resources, this alternative was rejected. For these reasons, the EIR reasonably concluded that such relocation would conflict with Project objectives.

Response SC-8

The commenter expresses concern that the Patterson Slough Overlook (West-side) Spur Trail and wildlife observation platform will have more severe impacts to wildlife than current use of the existing spur road. However, up until as recently as three years ago, the Patterson Slough Overlook (West-side) had several large farm labor dormitories and these, along with the access road leading to them, are clearly visible in the June 2016 Google Earth imagery. This area is now grazed and the shepherd stages his work in this area. We envision that use of this road/trail will be used on an almost daily basis as the staging area during the willow sausal restoration work, which with the follow-up maintenance and monitoring, may extend for 7 to 10 years or more. This is the estimated timeline for successful completion of restoration and enhancement, including site preparation, planting, irrigation and maintenance, follow up re-planting and adaptive management.

Section 4.1 Biological Resources, of the Draft EIR, discusses potential trail user biological impacts on pages 123 to 124, including Mitigation Measure BIO-1b (Prepare and Implement HMMP) and other mitigation measures that would reduce all impacts on biological resources to a less-thansignificant level, including the Patterson Slough Overlook (West-side) Spur Trail. Page 91 of the LUPA provides for seasonal trail closure if needed as part of Adaptive Management. This analysis is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. It provides substantial evidence, in compliance with CEQA, that the impacts of the Patterson Slough Overlook (West-side) Spur Trail on biological resources would be reduced to a less-than-significant level. Therefore, an alternative that eliminates this Spur Trail it is not necessary.

See also Responses CCCR-7, CCCR-8, CCC-20, and SC-12.

The third paragraph under the Existing Use and Management Activities heading on page 73 of the Draft EIR is amended as follows:

Current and ongoing management of the Project area includes mowing and sheep and goat grazing for weed and fire fuels control, and access to Patterson Slough and adjacent ponded wetland areas for mosquito and vector control purposes. Historic and the current disking of crop residue, seeding and planting operations and field mowing have taken place to the edge of the field boundaries along Patterson Ranch Road, Paseo Padre Parkway and Ardenwood Boulevard, Line P/Ardenwood Creek, and the Burrowing Owl levee on the south end of the Project area. Mowing also occurs up to the edge of the Slough. Grazing also occurs up to the field edges and the edge of Patterson Slough, and mowing equipment and grazing support vehicles and equipment, including a Sheppard's trailer have traditionally staged at a disturbed upland area associated with the former and now demolished farm labor housing barracks located near the middle of Patterson Slough, on its immediate south side. <u>Up until as recently as three years ago, the Patterson Slough Overlook (West-side) area had several large farm labor dormitories and these, along with the access road leading to them, are clearly visible in the June 2016 Google Earth imagery. The aerial image labels this road as a trail. As noted above, this area is now grazed and the shepherd stages his work in the vicinity of the former dormitories.</u>

Response SC-9

Special Status plant species are most often associated with unique environmental conditions, such as rocky or serpentine soils, vernal pools, and wetland and riparian areas, and saline/alkaline soils. This is the case at the Coyote Hills Park Expansion Area.

The observed Special Status plant species occur within an area of saline alkali soils distributed in three small patches in the southern half of the approximately 47-acre area south of Line P/Ardenwood Creek. Except for seasonally wet and small ponded areas and Patterson Slough, the majority of the Park Expansion Area north of Ardenwood Creek does not contain unique environmental conditions. This entire area has over 150 years of farm-related disturbance, including most recently periodic mowing and grazing. The southern area also has a nearby native seed source in the saline sodic wetlands to the immediate south. The result is a generally tall growth of mostly Mediterranean grasses and weedy species that suppress the growth of potential Special Status plant species. This fact, combined with previous biological investigations and observations completed during plant community and wetlands mapping, lead to the conclusion that Special Status plant species are highly unlikely to be present north of Ardenwood Creek. and that comprehensive

botanical surveys were not needed or warranted north of Ardenwood Creek. This conclusion has been confirmed by botanist Brad Olson, who has been conduction field investigations, including pilot native plant restoration trails throughout the Project area north of Ardenwood Creek for the last 10 months, and has not observed any rare plants. Mr. Olson agrees with the assessment that rare plants are very un-likely to occur north of Ardenwood creek. (personal communication, May 7, 2019, field meeting with J. Peters, Questa).

See also response CNPS 5-11 for additional discussion of this issue.

The proposed Mitigation Measure BIO-1c for potential Special Status plant species impacts requires the completion of Special Status plant species pre-construction surveys by a Qualified Botanist, with the direction to realign and relocate project features such as trails to avoid identified populations. There is enough flexibility in the trial plans to accomplish this. In the unlikely event that realignment and relocation of project features such as trails to avoid identified populations is not feasible, a recovery and relocation plan for Special Status plant species will be prepared by the Qualified Biologist and Park District staff biologists. If part of an HMMP, it is also subject to review and approval by CDFW.

This mitigation measure has been used successfully on a number of Park District projects.

Section 4.1 Biological Resources, on pages 65-129 of the Draft EIR, evaluates project impacts on biological resources, including special status species, and identifies mitigation measures that would reduce all impacts on biological resources to a less-than-significant level. This analysis, which includes all physical effects of the Proposed Project, as required by CEQA, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Therefore, the EIR complies with CEQA, and further analysis is not required.

Response SC-10

As noted by the commenter, previous California red-legged frog (CRLF) and California tiger salamander (CTS) protocol surveys, which did not find these Special Status species within Patterson Slough, are now more than 12 to 15 years old. The nearest CNDDB noted populations (May 1999) of this species are more than 5 miles away, in an unnamed drainage course in Union City, and separated from Patterson Slough by mostly urban areas. Patterson Slough itself is a disconnected and short watercourse, fed largely by intercepted and upwelling groundwater and lacking tributary riparian streams that may provide suitable movement corridors for re-population. It is therefore unlikely that CRLF would have repopulated Patterson Slough since completion of the protocol surveys. Regardless, there are no project plans to significantly disturb Patterson Slough and a 100-foot minimum setback or buffer from the slough edge would be utilized for new trail facilities and overlooks, exceeding the City of Fremont's Watercourse Ordinance requirements. The nearest CNDDB occurrence of CTS is from a site in Fremont approximately 7 miles southeast of Patterson Slough, and also separated by urban areas with no obvious movement corridor for re-population.

Preconstruction biological surveys would be completed along Patterson Slough with the opportunity to make adjustments to trail locations/features, depending on findings and results. This would be done in consultation with CDFW.

The Park District did consider the possibility of introducing CRLF and CTS to Patterson Slough, but Project Wildlife Biologist and noted expert on CRLF, Dr. Sam McGinnis, recommended against this as he considered the water quality of Patterson Slough to be too brackish to support this freshwater-dependent species.

Section 4.1 Biological Resources, on pages 65-129 of the Draft EIR, evaluates project impacts on biological resources, including California red-legged Frog and California tiger salamander, and identifies mitigation measures that would reduce all impacts to a less-than-significant level. This analysis is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. It provides substantial evidence, in compliance with CEQA, and further analysis is not required.

Response SC-11

The following paragraph is added after the first paragraph under the San Joaquin spearscale (Etriplex joaquinana) (CNPS 1B.2) heading on page 101 of the Draft EIR:

Four discrete areas of rare plants were observed during Jane Valerius' 2016 rare plant survey during the summer 2016 of the Southern Wetlands Natural Unit. Each of the four separate geographic areas contains between six and 12 rare plants.

Because of the sensitivity of this information, a map showing the locations of rare plans is not provided in this response document, but will be sent to CNPS upon request.

Response SC-12

Habitat fragmentation and potential trail user impacts on wildlife and wildlife habitat issues are discussed on pages 123-124 of the Draft EIR. The baseline for habitat characterization and analysis of potential trail user noise and disturbance impacts on wildlife is the date of the NOP, May 14, 2018. A description of existing uses, and the disturbance history of areas where new trails are proposed is discussed on page 73 of the DEIR The existing habitat that would be disturbed by the trail, trail spurs, loops and wildlife observation platforms consist of poor quality/relatively low habitat value ruderal areas that have a long history of human disturbance. These areas primarily provide foraging habitat for raptors, including White-tailed Kite, Northern Harrier, and Swainson's hawk. The ruderal areas where public access trails are proposed would be restored and enhanced to oak savanna and the grasslands will be mowed and managed for fire fuels reduction and to better enable the raptors to see their prey, such as voles. Trail features will be constructed prior to or concurrent with habitat establishment and therefore there is no significant impact. Future trail users and the noise and disturbance they create in terms of physical and visual presence, noise and their accompaniment by leashed dogs could potentially effect new wildlife species, including Special Status Species, using the restored, enhanced, and better managed habitat, but for CEQA purposes this is not considered to be a Project-related impact. However as noted on page 91 of the LUPA, the Project's proposed Adaptive Management approach to habitat restoration and management, allows some trail areas to be closed seasonally, for instance during critical bird nesting periods, or because of trail ponding and access issues, the need to repair trails and fencing, and restore and replant habitat areas. (See also response CCCR-7,8 and SC-3, 5, 7.)

Other than minor trimming of willow branches to facilitate removal of the farm labor Contractors Residence and upgrade of the existing dirt road to allow use as a trail, there will be no physical impact to Patterson Slough. Potential impacts to Patterson Slough are also discussed in Response CCCR-20.

As noted above, Section 4.1 Biological Resources, on pages 65-129 of the Draft EIR, evaluates project impacts on biological resources, and identifies mitigation measures that would reduce all impacts to a less-than-significant level. This analysis is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. It provides substantial evidence, in compliance with CEQA, and further analysis is not required.

Response SC-13

The commenter is correct in pointing out the seeming contradiction that some areas would be restricted to all dogs, including those on-leash, while other areas dogs are allowed, but only on a leash. However, the two points can be reconciled: *where dogs are allowed*, they must be on leashes. Regarding enforcement, ordinance enforcement is not a CEQA issue.

The last complete paragraph of page 42 of the Draft EIR is revised as follows:

Provisions of Park District Ordinance 38 applicable to the adjoining Coyote Hills Regional Park would be extended to the Park Expansion area. As such, Park operating hours would be from dawn to dusk and no lighting other than security lighting in areas of buildings would be provided. Consistent with current regulations at Coyote Hills Park, less sensitive portions of the Park Expansion area would be designated as a "Leash Required Area" for Park visitors with dogs, with no leash optional open areas. Signage and fencing would be used to keep Park visitors, including <u>unauthorized/</u>un-leashed dogs, on trails and other designated public areas and out of existing and restored habitat.

In regards to the comment that the DEIR does not address potentially significant impacts of dogs on wildlife and special status species, the following is added to page 124 of the EIR, inserted after 4th paragraph from the top

As indicated in the Project Description on page 42 of the DEIR, dogs are permitted on leash only and on trails only and other paved/improved areas in less sensitive habitat areas, such as restored oak savanna and enhanced grasslands. All dogs will be precluded from existing and restored willow sausal and mixed riparian forest areas such as along and adjacent to Patterson Slough, and from existing and restored wetlands, such as the Southern Wetlands Natural Unit. Since dogs are not allowed in sensitive areas and new proposed trails and visitor serving facilities are typically setback at least 100 feet from the edge of adjacent sensitive habitat, and/or are screened using fencing, landscaped berms, the potential impacts of dogs on sensitive habitat and special status birds, migratory birds, and waterfowl is less than significant.

The effectiveness of signage is also not a CEQA issue. That said, the Park District's management intends to monitor all restoration areas closely to ensure successful habitat establishment. Fencing is typically designed to exclude the 90-95% of Park visitors who obey signage, fencing, and leash law regulations. Dog access under fences is not unimpeded, as it is expected the vast majority of dogs will be on leash. Park District experience is that with the advent of widespread cell phone availability, trail usage in sensitive areas tends to be self-policing; that is, some users elect to also call Park District staff and inform them of rule violations. In addition, other trail users often will say something to trail rule user violators, users that cross fences, or allow dogs off-leash, under fences, and into sensitive areas, helping with enforcement.

Response SC-14

The commenter is correct that some new park facilities, especially those with picnic areas, have the potential to attract mesopredators such as raccoons, rodents, feral cats and other unwanted animal pests. The Park District has long-term and extensive area-wide experience designing and managing Project components with picnic areas and campground to effectively deal with mesopredator problems. This includes use of wildlife-proof trash receptacles, monitoring of problem areas and increasing inspection and trash pickup when needed, and if and when the problems become severe, trapping and removal of feral animals and pest species following their approved District-wide IPM pest management program.

According to Coyote Hills Regional Park District staff, mesopredators currently exist onsite and with build-out of adjacent parcels with residential subdivisions and commercial/light industrial uses, the number of macropredators could increase, even if the project does not proceed. As noted in evaluating the potential issues of noise/disturbance impacts of visitors on adjacent sensitive Patterson Slough biological resources, the area where the picnic facilities are proposed was formerly a Farm Labor Contractors residence and included nearby farm labor housing dormitories, so there is a history of mesopredator attraction to this area that District staff currently address through their IPM pest management program. See, DEIR at page 71, NRM9. This ongoing management program includes the small parking area at the intersection of Paseo Padre Parkway and Patterson Ranch Road. The District IPM program was discussed in the 2005 Coyote Hills Regional Park Land Use Plan and CEQA document. The District's approved IPM program already currently includes the Park expansion area (see DEIR page 71, NRM9) and thus applies to the Project area.

See also Response SCSF1-10, SCSF1-24 and CCCR-3.

For these reasons, the potential attraction of mesopredators by providing new visitor facilities would not result in any new potential Special Status species impacts or other wildlife impacts that are not adequately addressed in the Draft EIR.

Response SC-15

The comment provides information on the potential impact of brown-headed cowbirds and expresses concerns that the Project will benefit the cowbirds. Although brown-headed cowbirds have been observed both within the Park Expansion area and Coyote Hills Regional Park to the west, this was not discussed as a significant resource management issue in the 2005 Coyote Hills Land Use Plan or Initial Study and this management issue has not been brought to our attention by Coyote Hills Park staff or Park District biologists.

The amount of land at the Project site devoted to agriculture (which the commenter noted can benefit cowbirds) would be reduced by the Project as more historically farmed land is restored to wildlife habitat. The picnic areas would be provided with modern wildlife-proof trash receptacles, which would reduce the amount of litter and food waste potentially available to cowbirds and other mesopredators as discussed in Response SC-14. Trails will be designed to facilitate daily park maintenance activities such as trash pick-up. In addition, cowbird will be added to the list of feral or

pest species that the Park District will commit to aggressively manage, and their management has been added to the LUPA Project Objectives, as described in Response SCSF1-23.

See also Responses SCSF1-10 and SCSF1-24.

For these reasons, the brown-headed cowbird would not result in any new potential Special Status bird species impacts that are not adequately addressed in the Draft EIR.

Response SC-16

The commenter is concerned that the District is basing its conclusion on the likelihood of the presence of rare plants on an assumption that previously disturbed areas would not contain rare plant species. The DEIR reached the conclusion that rare plants have a very low potential to occur north of Line P/Ardenwood Creek based on a careful review of site soils and hydrologic conditions, observations made by the project biologists during wetlands and plant community mapping, and more recently confirmed by field work and pilot test planting being completed by another botanist for development of the Restoration Plan. See also Responses SC-9 above, and CNPS-4 through CNPS-11.

Response SC-17

The commenter expresses concern that the overall Project, including habitat restoration and enhancement and public access features, could conceivably negatively impact populations of raptors, eagles, or other Special Status bird species, due to increased human activity in the area and expansion of oak savanna into existing treeless ruderal habitat. The overall net benefit of the Proposed Project is based in part on the fact that conversion or enhancement and management of ruderal areas, including selective seasonal mowing to reduce grass heights, will better enable hawks and raptors to see their rodent prey, increasing foraging success (Personal communication, telephone call, J. Peters, Questa Engineering, and S. McGinnis, PhD, Consulting Wildlife Biologist, May 21, 2017).

Oak tree density in the oak savanna areas will not materially affect the ruderal to enhanced grassland conversion. There is little doubt that conversion of existing ruderal areas to willow thickets and mixed riparian forest will greatly benefit many Special Status bird species, as the total restored and enhanced habitat area will increase more than ten-fold. (Personal communication, telephone call, J. Peters, Questa Engineering, and S. McGinnis, PhD, Consulting Wildlife Biologist, May 21, 2017). As noted on page 124 of the Draft EIR, the Project area has had a disturbance history associated with farming, hay production, and grazing of over 150 years, with roads and public access trails ringing the Project area. This baseline of disturbance and routine habitat conversion associated with cultivated agriculture is greater and more impactful on special-status bird species than the proposed project.

This Final EIR includes a Mitigation Monitoring and Reporting Program (see Appendix 1), to ensure the implementation of mitigation measures identified as part of the environmental review for the Project. The Park District and the design and implementation team will conduct more informal wildlife observations of the restoration and enhancement areas as a routine part of their monitoring for Adaptive Management. The inclusion of more formal wildlife surveys as a part of the HMMP and project monitoring and adaptive management will be discussed with CDFW staff during development and review of the HMMP. See Response SC-20 and Mitigation Measure BIO-1b for revised HMMP Mitigation Measures and Performance Criteria.

Park District staff biologists will complete informal monitoring and wildlife observations as part of their ongoing vegetation maintenance and monitoring activities and programs.

Response SC-18

As discussed on pages 126-129 of the Draft EIR, the cumulative impacts of past, current, and reasonably foreseeable future projects in the vicinity of the project site (which encompasses the City of Fremont) would result in a significant cumulative effect on biological resources. For the definition of vicinity the common 5 mile search radius typically used in the California Natural Diversity Data Base (CNDDB) review was also used. However, the potential impacts of the cumulative projects on biological resources tend to be site-/project-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on each project. The Proposed Project's design, and implementation of mitigation measures identified above, would reduce the impacts of the project on sensitive biological resources to a less-than-significant level. As discussed in Response CCCR-19, in addition to being reduced to a less-than-significant level by mitigation measures identified in this EIR, the remaining Project-related contribution to cumulative impacts on biological and wetland resources would not be cumulatively considerable, and would not contribute to cumulative impacts on biological resources when viewed in connection with the effects of past, current and probable future projects. The cumulative impact of the Proposed Project on biological resources would be less than significant. Although the Proposed Project would have a cumulative impact on biological resources, it would be less than significant for the reasons above. The analysis of cumulative impacts is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. It provides substantial evidence, in compliance with CEQA, and further analysis is not required.

Response SC-19

The 16th bullet point of Mitigation Measure BIO-1a, on pages 15 and 108 of the Draft EIR, is revised as follows:

• Whenever possible, steep-walled holes or trenches shall be covered each evening to prevent animal entry. If this is not possible and the steep-walled holes or trenches must be left open overnight, escape ramps or structures shall be installed. Before sSteep-walled holes or trenches are backfilled, they shall be inspected for trapped animals on a daily basis until they are back-filled. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted immediately to determine the appropriate method for relocation. The Qualified Biologist may elect to order a stop work requirement if they determine it to be necessary, and upon consultation with the appropriate regulatory agency.

With the changes above, the revised Mitigation Measure BIO-1a is equal to or more effective than the version of Mitigation Measure BIO-1a in the Draft EIR. No significant new impacts, or substantial increase in the severity of a impact identified in the Draft EIR, are identified by the text changes above. Therefore, recirculation of the Draft EIR is not required.

Response SC-20

The commenter requests additional information on Mitigation Measure Bio 1b, including responsible parties, performance standards, and monitoring and reporting methods, and contingency measures. The commenter also questions why additional information on the proposed Restoration Plan that serves as a mitigation measure cannot be presented at this time.

The Park District and its biologists and restoration planning and design team are continuing to acquire additional information on the biology, soils, and hydrology of the Park expansion area that is needed for preparation of a detailed Restoration Plan. This work includes completion of pilot restoration planting plots using native plants.

As the existing conditions sections for biology, geology/soils, and hydrology/water quality indicate, the interaction among these factors is unusually complex and unique within the Project area. Developing a full understanding of the interactions of these factors, including potential future effects of climate change and rising Bay tidal waters needs to be achieved and incorporated into the Plan. However, the level of understanding of this complex area is complete enough as described in the DEIR to develop a determination of potential project impacts on biological resources, and to develop mitigation measures and performance standards that fully offset potential biological impacts.

The following provide the requested additional information:

Mitigation Measure BIO-1b, on pages 16 and 109 of the Draft EIR, is amended to add the following after the second bullet point:

- <u>East Bay Regional Park District shall be the responsible party for preparation and implementation of the HMMP for work/impact mitigation within the Patterson Slough and Western Wetlands Natural Units, the Ranch Road Recreation Unit, and the Historic Patterson Farm Agricultural Unit. Alameda County Flood Control and Water Conservation District (ACFCWCD) shall be the responsible party for HMMP implementation within the Southern Wetlands Natural Unit. Achievement of performance standards shall be based on comparison with impacted sensitive habitat, as required by regulatory permits for the project. Reference sites of impacted sensitive habitat shall be surveyed for biological resources and documented prior to earthwork.</u>
- Habitat Compensation Measures:
 - o <u>Temporarily disturbed ruderal areas shall be stabilized to control erosion and dust</u> production prior to restoration or enhancement.
 - o Disturbed or impacted wetlands shall be compensated at a 2:1 ratio.
 - Disturbed or impacted areas containing rare or Special Status plants that cannot be avoided shall be compensated at a 3:1 ratio.
 - Disturbed or impacted mixed riparian and oak woodland plant communities located within Patterson Slough shall be compensated for at a 3:1 ratio. Work includes re-seeding, replanting, and weed control using PM methods.

- <u>Performance Standards:</u>
 - Existing ruderal/disturbed areas shall have a minimum 70% cover of grasses and forbs within one year of seeding.
 - Wetland areas shall have a minimum 70% relative cover of wetland plants after seven years. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
 - Willow and mixed riparian forest areas that provide compensation for disturbance to their habitats shall have a minimum 50% native plant survival and have achieved a minimum 60% canopy cover within ten years of planting. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
 - Invasive plants that are listed as High invasive threat by the California Invasive Plant Council (Cal-IPC), exclusive of non-native grasses, shall not exceed a 5% cover after seven years.
- <u>Monitoring and Reporting:</u>

Monitoring will include a combination of photographic monitoring from permanent photo points and random sampling of the vegetative community using a one-square yard sampling frame (quadrat) at permanent vegetation monitoring stations within each target vegetation community, including control sites for each vegetation community. Permanent sampling locations will be located with posts within each vegetation community following completion of final grading, seeding, and planting. One permanent sampling location will also be established within each reference vegetation community located within the project area. Plant species and their absolute percent (%) cover will be recorded within three randomly located quadrats at each sampling location, including the reference vegetation communities. Sampling will occur once per year at the end of the wet season, typically in late spring or early summer (May-June) or as timing corresponds with the time when the majority of species will be identifiable.

- <u>Reporting shall occur at years 1, 3, 5, 8 and 10 following construction. If performance standards have been met at year five, the monitoring and reporting can be concluded.</u>
- <u>Remedial Measures and Contingencies:</u>
 - o If the annual monitoring of percent survival and cover indicate that target performance and success criteria, or if health and vigor observations so indicate, and as determined by the Qualified Biologist remedial measures shall be undertaken. These can include re-seeding, mulching, irrigation, replanting, pest control, or relocating target vegetation cover as necessary to achieve the performance criteria. Native plants determined to not be successful may be substituted using comparable native trees, shrubs, vines, and herbaceous species that have demonstrated successful growth and establishment.

See also Responses CCCR-20 and SC-4.

Response SC-21

Similar to nesting migratory bird species where species-specific buffer requirements are not delineated in a nesting bird mitigation measure, the buffer area needed to protect rare plants is also micro-site and species specific. For instance, a rare plant species that occupies a vernal pool or seasonal wetland that has a small/tributary watershed area it depends upon for rainfall runoff would have differing and field-determined buffer requirements than a plant that grows in highly alkaline

soils or serpentine soils, where the setback or buffer is soil dependent. This is best and most often left to the Qualified Biologist (Botanist) to determine, based on preconstruction survey encountered rare plants and consultation with CDFW and the mitigation ratio would be 3:1 for impacts to rare plants. The HMMP for rare plants, which will be subject to review and approval by CDFW, will include as a contingency, relocating the rare plant mitigation site should soils or other conditions not support achieving targeted mitigation ratio success criteria.

The Park District and its staff biologists regularly solicit, select, and retain qualified wildlife and fisheries biologists, wetlands scientists and botanists to perform surveys and develop mitigation recommendations and mitigation plans. The selection process is not based on costs, but on the biologists' qualifications and experience relative to specific project needs. Park District staff biologists then work with the qualified biologists in reviewing recommendations, including issues such as required buffers and setbacks, species relocation issues, approaches and techniques, and compensatory mitigation where needed. Most often when a regulatory permit is required, the regulatory agency (CDFW or USFWS) will set minimum qualification standards for the qualified biologist, and will review and approve resume submittals. Agency biologists are also available for assistance in developing buffer and setback recommendations, and reviewing and approving compensatory mitigation plans, including success criteria, maintenance, monitoring and reporting.

The HMMP for rare plants will include contingency measures, should seeding, growing container stock for field planting, or transplanting not meet the success criteria. The mitigation ratio for rare plants has been increased from 1:1 to 3:1 (see Responses CNPS-13 and SC-20, regarding revised Mitigation Measures BIO-1b and BIO-1c).

The statement that "the DEIR appears to allow impacts to occur prior to completion of the mitigation efforts" is inaccurate. CEQA mitigation is generally initiated only immediately prior to the start of project construction, and because of a typical five- to ten year monitoring and reporting window, extends beyond construction. A minimum five-year timeframe for confirmation of successful mitigation is proposed for rare plants (Mitigation Measure BIO-1c). The remedial or contingency measures that will be undertaken will in part be determined by an understanding of the cause of the rare plant's mitigation failure, such as: a) failure to germinate, b) failure to thrive, mature, flower, set seed, c) soil, nutrient, disease, or moisture availability problems, or d) undetermined.

The following information provides support for the determination of a high likelihood of success of rare plant mitigation in the Southern Wetlands Natural Unit. This area was intensively farmed for over 100 years, and the saline-alkali native plant seeds in the soil most likely would have been extinguished and made non-viable over that long time period. Drainage conditions have also been altered by grading and ditching. The rare plant seeds of three differing species could have either blown in or been brought in by birds and wildlife to reestablish the population, possibly from saline seasonal wetlands to the south. This natural reestablishment success indicates that with some intervention to optimize soil and soil moisture conditions and remove competition from weedy species, seeding, and transplanting should work.

The commenter also expresses concern about the Park District's consultation with CDFW as part of Mitigation Measure BIO-1c. This consultation is appropriate under CEQA because, with the information provided and revisions identified in Response SC-20, it is part of a greater mitigation

plan that meet's CEQA's requirements: (1) the Park District has committed itself to this mitigation S, (2) has adopted appropriate performance standards for the mitigation , (See SC-20) (3) identified potential actions that may be considered and (4) the record establishes that it was impractical to develop the mitigation (Restoration Plan) now. *See* CEQA Guidelines § 15126.4.

Response SC-22

The Park District anticipates that at least two full-day bird surveys will be conducted by a Qualified Biologist for each separate construction area associated with each phase of implementation. The final determination as to the total number of surveys to be completed, and the survey protocol and methodology, will be determined by a Qualified Biologist in consultation with Park District staff biologists, and where appropriate, in consultation with CDFW, associated with regulatory permitting.

The analysis of impacts on special status birds, and Mitigation Measure BIO-1d, pages 113-114 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Mitigation Measure BIO-1d is sufficient to mitigate the impacts of the Proposed Project to special status birds, migratory birds, and raptors, in compliance with CEQA, and further analysis is not required.

Response SC-23

The status of tricolored blackbird was changed by CDFW from a Species of Special Concern to a California Threatened Species in April 2018. Tricolored blackbirds were not observed during preconstruction biological surveys or construction biological monitoring during construction of the separate Ardenwood Creek/Line P Flood Control and Restoration Project by ACFCWCD in the summer and fall of 2016. Tricolored blackbirds have been previously observed within the adjacent Coyote Hills Regional Park, as well as along Patterson Slough, and in emergent marsh vegetation in the adjacent Coyote Hills Regional Park . Emergent marsh vegetation occurs along lower Line P, just below the Project area.

Tricolored blackbirds have also been observed within the emergent marshes immediately adjacent to the Coyote Hills Visitor Center parking lot, including near where existing public access boardwalks traverse emergent marsh and ponded areas.

There are no new trails proposed along Patterson Slough, and no significant direct or physical impacts will occur to the riparian vegetation and emergent marsh areas along Ardenwood Creek or Patterson Slough. Both of these areas have experienced similar disturbance impacts along farm edge and channel maintenance roads associated with historic farming and flood control channel maintenance activities, as may occur when these existing roads will also be used for public access purposes.

For these reasons, the Proposed Project would have a less-than-significant impact on the tricolored blackbird. The analysis of impacts on tricolored blackbird is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Further analysis is not required.

Habitat suitable for Tricolored blackbirds was significantly enhanced along Line P/Ardenwood Creek as part of the ACFCWCD's recent construction project. Extensive suitable habitat would also be created as part of the willow sausal and mixed riparian forest restoration project within the Patterson Slough Restoration Unit. The willow sausal and mixed riparian forest, and wetlands habitat creation work, nearly all of which would preclude public access, would further minimize any potential trail user disturbance impacts to Tri-colored and other special status birds that use these habitats. Consultation on this issues with CDFW is expected, associated with regulatory permit review and approval. Implementation of Mitigation Measure BIO-1b (Prepare and Implement HMMP) will reduce impacts on Tricolored Blackbirds to less than significant.

Response SC-24

Black rail nesting locations would not be identified by intrusive ground surveys, but by using rail call identification and triangulation methods with either the Site-specific Protocol for Monitoring Marsh Birds: Don Edwards San Francisco Bay and San Pablo Bay National Wildlife Refuges (Wood et al. 2017) or the California Clapper Rail Survey Protocol (U.S. Fish and Wildlife Service 2015) as approved by the U.S. Fish and Wildlife Service (USFWS). Appropriate Black rail survey methodology, setback and buffer requirements and any work scheduling restrictions would be developed and implemented in consultation with CDFW.

Response SC-25

The Park District will commit to following current CDFW protocol for conducting burrowing owl surveys prior to construction (i.e. 6 surveys), as described in the March 2012 CDFW Staff Report on Burrowing Owl Mitigation (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843)

In the event that burrowing owls are discovered in the Project area during the protocol surveys, the Park District will consult with CDFW in developing and implementing burrowing owl mitigation measures, including monitoring the success of mitigation measures, and implementing contingency plans. The most likely location for mitigation of disturbed burrowing owl habitat is along the Burrowing Owl Levee, which forms the southern boundary of the Project area. Anticipated mitigation ratio is 3:1 and mitigation may include the use of artificial burrows and habitat enhancement of adjacent areas. a. Management, and protection of adjacent habitat as described in the March 2012 CDFW Staff Report would be followed and incorporated into the Restoration and Enhancement Construction Plan and/or HMMP. The adjacent lands include potential habitat areas that can be enhanced and restored for burrowing owls. If determined to be needed, Burrowing Owl mitigation measures will be included in the HMMP, which will be subject to review and approval by CDFW.

The analysis of impacts on burrowing owls, and Mitigation Measure BIO-1g, page 116 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Mitigation Measure BIO-1g is sufficient to mitigate the impacts of the Proposed Project to burrowing owls, in compliance with CEQA, and further analysis is not required.

See also Response SCSF1-22.

Response SC-26

Bats, including several potential Special Status bat species, have a potential to occur in the ceiling or attic of the Contractors Residence, but their presence has not been confirmed. The Park District, which operates number of public park facilities throughout Alameda and Contra Counties, has prior experience in dealing with bats roosting in their buildings and has developed specific policies and procedures for dealing with bats, which are reflected in Mitigation Measure BIO-1i. This mitigation work, as needed, would be completed by a Qualified Wildlife Biologist experienced in dealing with bats. If the bats are Special Status species or if there is a perceived risk to the local population, the Park District and Biologist would consult with CDFW, including on survey methodology, bat expert minimum qualifications, and the development and implementation of appropriate mitigation measures. Typical methods for bat surveys to be considered are summarized in the California State Parks Department summary "Inventory Monitoring Protocols Bats" Ċ (https://www.parks.ca.gov/pages/734/files/imap%20bats%20protocol%20table%20.pdf) Mitigation may include construction of artificial bat houses in the tree canopy of Patterson Slough, if recommended by the Qualified Biologist and bat expert.

The analysis of impacts on bats, and Mitigation Measure BIO-1i, pages 117-118 of the Draft EIR, is at a level of detail sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Mitigation Measure BIO-1i is sufficient to mitigate the impacts of the Proposed Project to bats, in compliance with CEQA, and further analysis is not required.

Mitigation Measure BIO-1*i*, on pages 24 and 118 of the Draft EIR, is amended to add the following after the last bullet point:

To compensate for any loss of bat roosts within Patterson Slough, the Park District shall install
 artificial bat roosts (bat houses) when an existing bat roost is lost. The artificial bat roost(s) shall be
 of such a type and quantity as to provide sufficient replacement roosts for all of a displaced colony.
 All work, including design and location of artificial roosts and other mitigation measures shall be
 completed by a Qualified Biologist experienced with bats, including conducting bat surveys and
 preparing bat protection and mitigation plans Where Special Status bats are found to be present, the
 Qualified Biologist shall consult with CDFW.

Response SC-27

The determination of the need for more detailed Special Status Species surveys is typically made by the Project Biologist. It is based on public and agency NOP Scoping comment. It is also based on their professional judgment after a review of existing biological studies, such as those completed for the proposed Patterson Ranch Development Project EIR, review of plant community, soils and topographic maps to determine the occurrence of unique soils and hydrologic conditions), the results of a review of the CNDDB, and fieldwork to determine the likelihood of potential presence/occurrence. The occurrence of poorly drained, saline-alkali soils in the Southern Wetlands Natural Unit lead to the judgment that rare plant surveys were required south of Ardenwood Creek, but not for those portions of the Project areas north of the creek.

For rare plants, the fieldwork included the Project Botanist/Wetlands Biologist visiting all areas of the Project where disturbance and improvements were proposed during the period when rare plants were likely flowering and observable (April and May 2017).

Based on the fact that the site has had over 100 years of agricultural disturbance, including regular mowing and grazing for weed control, and is predominantly a weedy/ruderal grassland, the Project Botanist/Wetlands Biologist determined that there is low potential for occurrence of rare plants, except in the Southern Wetlands Natural Unit. Special Status plant species surveys were conducted and the occurrence of three saline-alkali associated rare plants were found. The potential occurrence of other non-plant Special Status species was also determined to be low in the ruderal areas, and moderate to high along Patterson Slough.

The analysis of impacts on Special Status species, and mitigation measures identified in 4.1 Biological Resources, pages 65-129 of the Draft EIR, are at a level of detail is sufficient to allow decision-makers to make informed decisions about the environmental impacts of the project. Further analysis is not required.

See also CNPS – 5-11.

4 **REVISIONS TO THE DRAFT EIR**

This chapter presents specific changes to the Draft EIR that are being made in response to comments made by the public, as well as staff-directed changes including typographical corrections and clarifications. In each case, the revised page and location on the page is presented, followed by the textual, tabular, or graphical revision. <u>Underline</u> text represents language that has been added to the EIR; text with strikethrough has been deleted from the EIR.

None of the revisions constitutes significant changes to the analysis contained in the Draft EIR. As such, the Draft EIR does not need to be recirculated.

Page ii

The Table of Contents is revised as follows:

Appendix A: Initial Study Appendix B: Notice of Preparation (NOP) and Comments on NOP Appendix C: Traffic Impact Report Appendix D: EBRPD Guidelines for Protecting Parkland Archaeological Sites <u>Appendix E: Special Status Species Studies</u>

Page 1

The third paragraph is revised as follows:

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA). The East Bay Regional Park District (Park District, or EBRPD) is the lead agency for the Project. There are two responsible agencies with discretionary approval over certain elements of the Project: the City of Fremont and the Alameda County Flood Control and Water Conservation District. The Project will The Park District will work with the City of Fremont on require permits for building, building demolition, reuse of an historic structure, pienic area if group pienic areas are proposed, bridges, improvements within Patterson Ranch Road-Paseo Padre Parkway intersection, grading, drainage, and stormwater management issued by the City of Fremont. Other City of Fremont review would include historic architectural review, discretionary design review forif any group picnic areas are proposed, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, and potentially tree removal permits if street trees are affected.

Page 4

The third paragraph is revised as follows:

Because there could be potentially significant impacts from the Proposed Project for the <u>fourthree</u> issues listed above, an EIR was prepared to evaluate these three issues in more detail.

Page 8

The third paragraph is revised as follows:

City of Fremont – Implementation of elements of the park development plan may require: Conditional Use Permit (CUP) and discretionary design review, as needed for establishing a group pienic facility, Discretionary Design Review Permit for proposed site improvements, Historic Architectural Review for dismantling and removal of the Labor Contractors Residence and substantial revisions to the historic Arden Dairy Milk House, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, grading permit, stormwater management and drainage permit, building permits, including CALGreen compliance, tree removal permits if street trees are affected, review by the City Engineering Department and approval by the City's Floodplain Manager in the Engineering Department of any bridges over FEMA regulatory flood plains, and approval of Project Plans, Encroachment Permits and other construction agreements for improvements to or within the Patterson Ranch Road-Pasco Padre Parkway intersection and public road improvements.

- <u>City of Fremont Elements of the park development plan that could will-require approvals from the</u> <u>City of Fremont:</u>
 - <u>Group Picnic Facility</u> –Depending on the ultimate size and configuration, a Conditional Use Permit (CUP) and Discretionary Design Review.
 - <u>Patterson Ranch Labor Contractors Residence</u>, Dismantling and Removal Historic Architectural Review and a demolition permit.
 - <u>Arden Dairy Milk House, Adaptive Re-use CUP and a building permit.</u>
 - <u>Farm Stand The Farm Stand would be considered an ancillary use to an otherwise permitted</u> agricultural use and is allowed, but could be subject to special provisions contained in Fremont Municipal Code (FMC) Section 18.19.470 (Roadside Stands) and a building permit.
 - <u>Grading Grading permit.</u>
 - Stormwater Management Stormwater management and drainage permit.
 - <u>Street Tree Removal Tree removal permit for any City street trees that need to be removed</u>.
 - <u>Bridges Requires review by the City Engineering and approval by the City's Floodplain Manager</u> for bridges over FEMA regulatory flood plains.
 - <u>Public Right-of-Way Improvements and Improvements to or Within the Patterson Ranch Road-Paseo Padre</u> <u>Parkway Intersection--</u> Requires approval of Project Plans, Encroachment Permits and <u>Construction Agreements.</u>

Page 10

Mitigation Measure AIR-1 is revised as follows:

AIR-1 The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:

- 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The EBRPD's phone number shall also be visible to ensure compliance with applicable regulations.

The following measures, contained in Table 8-3 of the Bay Area Air Quality Management District's May 2017 California Environmental Quality Act Guidelines, also shall be included in the Project construction dust/emission control plan:

- 1. <u>All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.</u>
- 2. <u>All excavation, grading, and/or demolition activities shall be suspended when average wind speeds</u> exceed 20 mph.
- 3. <u>Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas</u> of construction. Wind breaks should have at maximum 50 percent air porosity.
- 4. <u>Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas</u> as soon as possible and watered appropriately until vegetation is established.
- 5. <u>The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities</u> on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of <u>disturbed surfaces at any one time.</u>
- 6. <u>All trucks and equipment, including their tires, shall be washed off prior to leaving the site.</u>
- 7. <u>Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.</u>
- 8. <u>Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</u>
- 9. <u>Minimizing the idling time of diesel powered construction equipment to two minutes.</u>
- 10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- 11. <u>Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3:</u> <u>Architectural Coatings).</u>
- 12. <u>Requiring that all construction equipment, diesel trucks, and generators be equipped with Best</u> <u>Available Control Technology for emission reductions of NOx and PM.</u>
- 13. <u>Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.</u>

Page 15

The 16th bullet point of Mitigation Measure BIO-1a is revised as follows:

• Whenever possible, steep-walled holes or trenches shall be covered each evening to prevent animal entry. If this is not possible and the steep-walled holes or trenches must be left open overnight, escape ramps or structures shall be installed. Before sSteep-walled holes or trenches are backfilled, they shall be inspected for trapped animals on a daily basis until they are back-filled. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted immediately to determine the appropriate method for relocation. The Qualified Biologist may elect to order a stop work requirement if they determine it to be necessary, and upon consultation with the appropriate regulatory agency.

Page 17

The second bullet of Mitigation Measure BIO-1b is revised as follows:

• To facilitate preparation of the Plan, the Park District shall, prior to construction, have a <u>qualified</u> botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species, and comply with botanical survey requirements of Mitigation Measure BIO-1c.

Mitigation Measure BIO-1b is amended to add the following after the second bullet point:

- <u>East Bay Regional Park District shall be the responsible party for preparation and implementation of the HMMP for work/impact mitigation within the Patterson Slough and Western Wetlands Natural Units, the Ranch Road Recreation Unit, and the Historic Patterson Farm Agricultural Unit. Alameda County Flood Control and Water Conservation District (ACFCWCD) shall be the responsible party for HMMP implementation within the Southern Wetlands Natural Unit. Achievement of performance standards shall be based on comparison with impacted sensitive habitat, as required by regulatory permits for the project. Reference sites of impacted sensitive habitat shall be surveyed for biological resources and documented prior to earthwork.</u>
- <u>Habitat Compensation Measures:</u>
 - <u>Temporarily disturbed ruderal areas shall be stabilized to control erosion and dust</u> production prior to restoration or enhancement.
 - o Disturbed or impacted wetlands shall be compensated at a 2:1 ratio.
 - Disturbed or impacted areas containing rare or Special Status plants that cannot be avoided shall be compensated at a 3:1 ratio.
 - Disturbed or impacted mixed riparian and oak woodland plant communities located within Patterson Slough shall be compensated for at a 3:1 ratio. Work includes re-seeding, replanting, and weed control using PM methods.
- <u>Performance Standards:</u>
 - Existing ruderal/disturbed areas shall have a minimum 70% cover of grasses and forbs within one year of seeding.
 - Wetland areas shall have a minimum 70% relative cover of wetland plants after seven years. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.

- Willow and mixed riparian forest areas that provide compensation for disturbance to their habitats shall have a minimum 50% native plant survival and have achieved a minimum 60% canopy cover within ten years of planting. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
- Invasive plants that are listed as High invasive threat by the California Invasive Plant Council (Cal-IPC), exclusive of non-native grasses, shall not exceed a 5% cover after seven years.
- Monitoring and Reporting:

Monitoring will include a combination of photographic monitoring from permanent photo points and random sampling of the vegetative community using a one-square yard sampling frame (quadrat) at permanent vegetation monitoring stations within each target vegetation community, including control sites for each vegetation community. Permanent sampling locations will be located with posts within each vegetation community following completion of final grading, seeding, and planting. One permanent sampling location will also be established within each reference vegetation community located within the project area. Plant species and their absolute percent (%) cover will be recorded within three randomly located quadrats at each sampling location, including the reference vegetation communities. Sampling will occur once per year at the end of the wet season, typically in late spring or early summer (May-June) or as timing corresponds with the time when the majority of species will be identifiable.

- <u>Reporting shall occur at years 1, 3, 5, 8 and 10 following construction. If performance standards have been met at year five, the monitoring and reporting can be concluded.</u>
- <u>Remedial Measures and Contingencies:</u>
 - o If the annual monitoring of percent survival and cover indicate that target performance and success criteria, or if health and vigor observations so indicate, and as determined by the Qualified Biologist remedial measures shall be undertaken. These can include re-seeding, mulching, irrigation, replanting, pest control, or relocating target vegetation cover as necessary to achieve the performance criteria. Native plants determined to not be successful may be substituted using comparable native trees, shrubs, vines, and herbaceous species that have demonstrated successful growth and establishment.

The first paragraph of Mitigation Measure BIO-1c is revised as follows:

Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species: The Park District, and its Construction Contractors, and restoration and maintenance personnel will implement measures to avoid and minimize potential adverse effects on Special Status plants, with a special focus on the Southern Wetlands Natural Unit. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.

The eighth bullet point of Mitigation Measure BIO-1c is edited as follows:

• If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 3:1 ratio based on the area of lost habitat (accurately field measured) or as determined by the Qualified Biologist and Park District biologists, and in consultation with CDFW, which has review and approval authority over a Rare Plant Mitigation Plan/Habitat Mitigation and Monitoring Plan. Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas.

Page 24

Mitigation Measure BIO-1i is amended to add the following after the last bullet point:

 <u>To compensate for any loss of bat roosts within Patterson Slough, the Park District shall install</u> <u>artificial bat roosts (bat houses) when an existing bat roost is lost. The artificial bat roost(s) shall be</u> <u>of such a type and quantity as to provide sufficient replacement roosts for all of a displaced colony.</u> <u>All work, including design and location of artificial roosts and other mitigation measures shall be</u> <u>completed by a Qualified Biologist experienced with bats, including conducting bat surveys and</u> <u>preparing bat protection and mitigation plans Where Special Status bats are found to be present, the</u> <u>Qualified Biologist shall consult with CDFW.</u>

Page 26

Mitigation Measure CUL-1b is revised as follows:

Mitigation Measure CUL-1b: If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont. <u>A</u> <u>Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code</u>.

Page 27

Mitigation Measure CUL-2a is revised as follows:

Mitigation Measure CUL-2a: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interiorqualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board. The documentation materials shall be placed on file with the City of Fremont, the Washington Township Museum of Local History, and the Fremont Main Library.

Page 28

Mitigation Measure CUL-5 is revised as follows:

Mitigation Measure CUL-5: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the <u>coronerPark District and/or its contractors</u> shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely

descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The most likely descendant shall have 48 hours after being allowed access to the site to make recommendations for disposition of the remains and associated grave goods.

Page 42

The last complete paragraph is edited as follows:

Provisions of Park District Ordinance 38 applicable to the adjoining Coyote Hills Regional Park would be extended to the Park Expansion area. As such, Park operating hours would be from dawn to dusk and no lighting other than security lighting in areas of buildings would be provided. Consistent with current regulations at Coyote Hills Park, less sensitive portions of the Park Expansion area would be designated as a "Leash Required Area" for Park visitors with dogs, with no leash optional open areas. Signage and fencing would be used to keep Park visitors, including <u>unauthorized/</u>un-leashed dogs, on trails and other designated public areas and out of existing and restored habitat.

Page 46

To correct a typographical error, the second paragraph is amended as follows:

Connections would also be made to the new San Francisco Bay Trail along the west side of Paseo Padre Parkway, and the Bay Trail would be extended south to the vicinity of Dumbarton Circle and Quarry Road, an additional approximately 1,000 feet.

Page 51

The last paragraph is edited as follows:

Wildlife Observation Platform

Public access features such as wildlife observation platforms (Figure 3-8) or overlooks would be at grade or placed on fill in non-wetland areas, or on elevated decks with ADA compliant ramps. The wildlife observation platforms would use wood or composite materials, be 15 to 25 feet in length and width, and elevated 5 to 8 feet above adjacent grade on surface placed concrete pier blocks or pin piers. This would minimize soil disturbance and potential damage to any below-ground cultural resources. The wildlife observation platforms would be placed a minimum of 30 100 feet from the willow-vegetated edge of the existing Patterson Slough, with installation of fencing and native landscaping to provide physical and visual barriers and screening, in voluntary compliance with the City of Fremont Watercourse (stream) setback protection ordinance. This ordinance requires a minimum 30-foot setback.

Page 54

The sixth bulleted item is amended as follows:

• City of Fremont (City) Department Divisions of Engineering and Planning – Management of stormwater runoff, grading and erosion control, hazardous materials/waste management, and flood plain regulation.

Page 69

Footnote number 7 at the bottom of page 69 is revised as follows:

⁷ CNPS Ranking System, http://www.cnps.org/cnps/rareplants/ranking.php, accessed on September 28, 2018. Additional information can be found at https://www.cnps.org/rare-plants/cnps-rare-plant-ranks.

Page 72

A description of the Park District's Pathogen Control Best Management Practices has been added after the last bullet on page 72, as follows:

East Bay Regional Park District Pathogen Control Best Management Practices

One of the pathogens of greatest concern to existing and restoration habitat in the Project area is from phytophthora (*P. ramorum*) infection. Sudden Oak Death is a phytophthora disease. This is a soil-borne pathogen that infects native and non-native trees, and woody plants. Phytophthora species are land dwelling organisms that thrive under wet soil conditions, such as occurs in the Patterson Slough area.

<u>P. ramorum</u> can survive, and appears to reproduce, in watercourses that drain Sudden Oak Death affected areas, which can contain spores of <u>P. ramorum</u>. More spores are typically present in watercourses during the wet season, but spores may be present in some streams year-round. Since Patterson Slough is disconnected to upstream drainage courses, this mode of spread is of low risk.

Moist soil containing phytophthora spores or organisms on hiking boots and bicycle tires has also been shown to spread Sudden Oak Death, as have vehicles driven on dirt roads that pass through lands infested with *P. ramorum*. This is especially a risk when soil conditions are muddy or damp. Poorly operated nurseries can also spread phytophthora through infected nursery stock used in restoration. To minimize the spread of this pathogen, the Park District adopted the following Phytophthora Best Management Practices in 2018.

<u>General</u>

- 1. <u>Phytophthora ramorum</u> is the plant pathogen known to cause the Sudden Oak Death disease. The disease kills oak and other plant species, significantly woody ornamentals, and has had devastating effects on the oak populations in California. Symptoms include bleeding cankers on the tree's trunk and dieback of the foliage, in many cases eventually leading to the death of the tree.
- 2. Equipment refers to any implement used to perform maintenance activities or travel to and from work sites. These include vehicles, mowers, skip loaders, tractors, weed eaters, shovels, rakes, etc.
- 3. <u>While absolute sanitation is difficult to attain, Contractors shall make every practicable effort to use the following District Best Management Practices (BMPs) during the project's installation and Plant Establishment period to aid in preventing possible sudden oak death disease at the Project sites.</u>

District General Construction BMPs -Before Entering District Property

The following procedures must be followed before entering any District property, including but not limited to Project Area, to make sure vehicles and gear, tools and boots are free of potentially infected soil, weed propagules, seed or other debris.

- 1. <u>Worker Training. Before entering the job site, field workers are to receive training that includes</u> information on Phytophthora diseases and how to prevent the spread of these and other soil-borne pathogens by following approved phytosanitary procedures.
- 2. <u>Clothing and Gear. At the start of work at each new job site, worker clothes should be free of all mud or soil. If clothes are not freshly laundered, workers shall remove all debris and adhered soil with a stiff brush. All gear should be cleaned with brushes, air or water to remove as much visible mud and debris as possible</u>
- 3. <u>Vehicles and Large Equipment</u>. Vehicles that only travel and park on paved public roads do not require external cleaning.

Before arrival at construction sites, vehicles must be free of soil and debris including on tires, wheel wells, vehicle undercarriages, and other surfaces. Vehicles may be cleaned at a commercial vehicle or appropriate truck washing facility. The interior of vehicles and equipment (cabs, etc.) must also be free of mud, soil, gravel and other debris (vacuumed, swept or washed).

District General Construction BMPs Before Leaving the Project Construction Sites

To minimize the potential for *P. ramorum* to spread beyond the Project area, the following procedures must be followed before leaving Project construction sites to make sure vehicles and gear, tools and boots are free of potentially infected soil, weed propagules, seed or other debris.

- 1. <u>Cleaning Equipment and Gear On-site. Scrub, brush and pick off soil, vegetation or other debris</u> from shoes, saws, vehicles and other equipment at the field or work site (this is 99% effective at removing infectious propagules and weed seeds). Other methods may include: blowing compressed air, followed by water or sanitizing solution, if necessary. When water is used, the Contractor is to ensure that no erosion occurs, or waterways are contaminated.
- 2. <u>Cleaning Area. Cleaning should be conducted on a surface that is unlikely to allow cleaned materials</u> to become re-contaminated, such as pavement, a plastic tarp, or a continuous layer of gravel.
- 3. Follow-up Cleaning. If complete on-site sanitation is not possible, decontamination can be completed at a local power wash facility or in an isolated area at an off-site equipment yard.

Preventing Potential Spread of Contamination within Sites

In a partially infested site, the potential for Phytophthora to spread within the site needs to be addressed. As it is not practical to identify every portion of a site that contains or is free of *P. ramorum*. Because *P. ramorum* contamination is not visible, work practices should minimize unnecessary movement of soil within locations to prevent potential pathogen spread sign using the following Best Management Practices.

- 1. Whenever possible, work on *P. ramorum*-infected and -susceptible species during the dry season. When working in wet conditions, keep equipment on paved or dry surfaces and avoid mud.
- 2. Do not bring more vehicles into work sites than necessary. Within the site, keep vehicles on surfaced or graveled roads whenever possible to minimize soil movement.
- 3. <u>Travel off roads or on unsurfaced roads should be avoided when such roads are wet enough that soil</u> will stick to vehicle tires and undercarriages. In intermittently wet areas, avoid visits when roads are wet; schedule activities during dry conditions when the risk of moving wet soil is minimal.
- 4. <u>Vehicles should be cleaned before leaving infested areas and before entering new areas.</u>
- 5. <u>Sanitize pruning gear and other equipment before working in an area with susceptible plants to avoid transporting the *P. ramorum* pathogen throughout the site, or from an infested location to other non-infested locations.</u>
- 6. <u>Do not use untreated water from potentially infested streams for irrigation, dust control on roads, or similar purposes.</u> Water can be treated with ultrafiltration, chemicals (chlorine, ozone), or UV radiation to eliminate Phytophthora spores.
- 7. <u>Conform to all federal and state regulations and inspections to prevent the movement of *P. ramorum*infested nursery stock.</u>

District BMPs Community Outreach

As moist soil on hiking boots and bicycle tires has been shown to spread Sudden Oak Death, the District is working on implementing an outreach program that includes information on Best Management Practices for minimizing the spread of *P. ramorum*. This information is being incorporated into park brochures, on-site information panels and the District web site. Information includes, but is not limited to, the following guidance:

- 1. <u>The East Bay Hills contains environments conducive to P. ramorum</u>, the plant pathogen known to cause the Sudden Oak Death disease.
- 2. To minimize the spread of P. ramorum, wherever possible, Park visitors should:
 - a. <u>Stay on paved, rocked and well-traveled trails; and avoid cross-country travel, especially under wet conditions.</u>
 - b. Avoid wet areas as the risk of spreading pathogens or weeds increases with the amount of mud, soil and organic debris that adheres to shoes, tools, bicycles, pets, etc.

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The third paragraph under the Existing Use and Management Activities heading is amended as follows:

Current and ongoing management of the Project area includes mowing and sheep and goat grazing for weed and fire fuels control, and access to Patterson Slough and adjacent ponded wetland areas for mosquito and vector control purposes. Historic and the current disking of crop residue, seeding and planting operations and field mowing have taken place to the edge of the field boundaries along Patterson Ranch Road, Paseo Padre Parkway and Ardenwood Boulevard, Line P/Ardenwood Creek, and the Burrowing Owl levee on the south end of the Project area. Mowing also occurs up to the edge of the Slough. Grazing also occurs up to the field edges and the edge of Patterson Slough, and mowing equipment and grazing support vehicles and equipment, including a Sheppard's trailer have traditionally staged at a disturbed upland area associated with the former and now demolished farm labor housing barracks located near the middle of Patterson Slough, on its immediate south side. <u>Up until as recently as three years ago, the Patterson Slough Overlook (West-side) area had several large farm labor dormitories and these, along with the access road leading to them, are clearly visible in the June 2016 Google Earth imagery. The aerial image labels this road as a trail. As noted above, this area is now grazed and the shepherd stages his work in the vicinity of the former dormitories.</u>

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The following paragraph is added after the second paragraph of the Ruderal Grassland (Rg) discussion:

No native grassland plant communities were observed during the biological field work other than saltgrass in the former agriculture drainage ditch in the Southern Wetlands Natural Unit and patches of purple needle grass (*Nassella pulchra*) also located within the Southern Wetlands Natural Unit just southwest of the agricultural drainage ditch. Very widely scattered small patches of California Brome (*Bromus carinatus*), meadow barley (*Hordeum brachyantherum*), creeping wild rye (*Elymus triticoides*), and blue giant wild rye (*Elemus glaucuss*) were also observed. In the wetland areas, the grass-like plants included tall flat sedge (*Cyperus eragrostic*), alkali bulrush (*Boboschoenus robustus*), Baltic rush (*Juncus balticus*), and toad rush (*Juncus bufonius*).

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
BIRDS				
Melospiza molodia pusillula Alameda Song Sparrow	None	CSC, BCC	Present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides.	Moderate Potential: The Project area provides potential habitat for this species with foraging and nesting habitat present.
<i>Laterallus</i> <i>jamaicensis</i> <i>coturniculus</i> California Black Rail	State Threatened	BCC, CFP	Resident in marshland (saline to freshwater) with established, dense vegetation. Common in upper tidal zone of emergent wetlands or brackish marshes dominated by bulrush (<i>Scirpus</i> <i>spp.</i>), cordgrass (<i>Spartina spp.</i>), and pickleweed (<i>Salicornia spp.</i>), commonly found nesting in dense cover such as pickleweed. Prefers larger, undisturbed marshes close to a major water source.	Moderate Potential: Suitable nesting habitat exists to the west of the Project area in Coyote Hills Regional Park and CBR observed in adjacent Regional Park. Unlikely to occur within Park Expansion Project area due to lack of suitable habitat.
<i>Rallus longirostris</i> obsoletus California Ridgeway Rail	State Endangered Federal Endangered	CFP	Endemic to large salt and brackish marshes; requires shallow areas, tidal channels, or mudflats for foraging.	Low Potential: Species has been observed west of Project area in Coyote Hills Regional Park. Status of species breeding locations within Alameda county is undetermined, documented individuals may not have bred adjacent area. Project area does not contain suitable habitat.
Accipiter cooperi Cooper's Hawk	None	CWL	Nests and breeds within mixed riparian forests alongside creek banks. Forages in open grasslands, valleys, and foothills.	Moderate Potential: The mixed riparian forests, oak and willow clusters along Patterson Slough provide adequate nesting habitat for this species.

As extensive edits were made throughout, Table 4.1-1, Special Status Wildlife Species, beginning on page 80 of the Draft EIR, is replaced in its entirety as follows for the convenience of the reader:

Scientific Name	Federal /	Other	Habitat Association	Potential for
Common Name	State Status	Status		Occurrence in Project
				area
Agelaius tricolor Tricolored Blackbird	CDE	BCC, CSC	This species breeds within riparian serubland, tules/willow/cattail thickets, and within freshwater marshes.	High Potential / Observed: Emergent freshwater thickets along Patterson Slough, K-line, and P-line channels provide nesting habitat. Species observed within Project area by H.T. Harvey (2001)
Xanthocephalus xanthocephalus.	None	CSC	Migratory species that nests within emergent wetlands within dense thickets, deep water, and along the	Low Potential: Rarely nests within the San Francisco Bay Area,
Yellow headed blackbird			edges of lakes or large ponds. Forages on large aquatic insects during breeding season.	Project area are not a sufficient breeding habitat.
Athene cunicularia	None	BCC, CSC	Resident of open, dry grasslands/scrublands with low growing vegetation. Breeds, forages in	High Potential / Observed: Observed along the northern
Duriowing Own			open grasslands that contain small mammal burrows.	perimeter of the Project area during the winter of 2002-2003 (Dexter, Wendy. May 10 th -2007.) Species has also been observed within Coyote Hills Regional Park.
Elanus leucurus White Tailed Kite	None	CFP	Resident of coastal/valley lowlands of California. Nests in isolated stands of large shrubs or trees, surrounded by open grassland. Preys on small mammals, birds, insects, reptiles, and amphibians.	High Potential / Observed: Observed foraging within the Project area during field surveys. Breeding habitat is present on site. Observed in 2000
				and 2001 nesting within mixed riparian forests (H.T. Harvey & Associates 2001).
Aquila chrysaetos Golden Eagle	FBGE	CFP, CWL, BCC	Breeds and winters on cliff walled canyons, and large trees within foothills, chaparral, sage juniper flats mountain areas and deserts.	High Potential/Observed: Occurs within the Coyote Hills Regional Park and likely forages within the Project area.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area	
<i>Circus cyancus</i> Northern Harrier			Nests within shrubby vegetation and forages in open grasslands, meadows, and wetlands.	High Potential / Observed: Nesting habitat present along the margins of Patterson Slough and the K-line and P-line channels. Suitable foraging habitat is present within the agricultural fields of the Project area. Species was observed in 2007, foraging, and documented breeding/nesting within Coyote Hills Regional Park.	
Geothlypis trichas sinuosa Saltmarsh Common Yellowthroat	None	CSC, BCC	Found in dense, mixed riparian thickets, and forests along waterways.	Moderate Potential: Suitable habitat and nesting grounds are present in the mixed riparian forest along Patterson Slough. Known to occur in Coyote Hills Park to the immediate west of the Project Area.	
<i>Ripatia tipatia</i> Bank Swallow	State Threatened		Migratory species to lowland and riparian habitats within coastal California. Nests in colonics along vertical cliffs with fine textured sandy soils near streams, lakes, or ocean.	High Potential / Observed: A possible colony was noted in a 1983 CNDDB observation within the Project area; and several nests were observed and protected under the Line P culvert crossing of Paseo padre Blvd in Spring 2016.	
Charadrius alexandrines nivosus Western Snowy Plover	Federally Threatened	CSC, BCC	Resident of sandy beaches, salt pond levees and the banks of alkali lakes. Nesting habitat is sandy/gravely soils.	No Potential: Project area does not contain suitable habitat for nesting.	

Scientific Name	Federal /	Other	Habitat Association	Potential for
Common Name	State Status	Status	Habitat Association	Occurrence in Project
Common Plane	otate otatas	otatus		area
				ureu
Buteo regalis	None	BCC	Preys upon lagomorphs (ground	Moderate Potential:
			squirrels, mice, etc) within open	Suitable foraging
Ferruginous Hawk			grasslands, sage brush flats, desert	habitat is present within
_			scrub, and low foothills, valleys.	the Project area for
				wintering; species has
				not been documented
				to breed within Project
				area but is rarely
				observed within the
				adjacent Coyote Hills
				Regional Park.
Falco peregrines	Federally	CFP, BCC	Resident species that forages within	High Potential /
anatum	Delisted	GIT, DCC	coasts, bays, marshes (primarily on	Observed: No suitable
a114 (4111	Denoted		waterbirds) and other wetland areas.	breeding/nesting
American Peregrine			Nests in protected cliff, ledges or	habitat is present within
Falcon			manmade structures.	the Project area.
				Species may be seen
				foraging or soaring
				over Project area.
Lanius ludovicianus	None	CSC, BCC	Inhabit open woodland areas with	High Potential /
Tanana d Chailes			short well-spaced vegetation,	Observed: Has been
Loggerhead Shrike			particularly those with spines or	observed and is known
			thorns.	to occur within the
				Project area.
Asio flammeus	None	CSC	Migratory species that can be found in	High Potential /
			grasslands and open areas. They perch	Observed: Has been
Short-eared Owl			in low trees or on theythe ground.	observed and is known
			, ,	to occur within the
				Project area.
Icteria virens	None	CSC	Habitat consists of dense growth along	Moderate Potential:
Vallana Das sets 1 Ol			waterways	The mixed riparian
Yellow Breasted Chat				forest along Patterson Slough may provide
				potential nesting /
				foraging habitat.
				ioraging nabitat.
Accipter striatus	None	CWL	Habitat includes mixed or coniferous	High Potential: Known
			forests, deciduous woodlands, and	to occur in the
Sharp-shinned Hawk			thickets. Often nests within groves of	neighboring Coyote
			coniferous trees in mixed woods,	Hills Regional Park.
			sometimes in dense deciduous trees or	Project area may
			pure coniferous forests with brush or	provide suitable
			clearings nearby. Tends to avoid open	foraging habitat within
			country	mixed riparian forest
				and/or ruderal
				grassland.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Falco mexicanus</i> Prairie Falcon	None	CWL	Resident of open hills, plains, prairies, deserts. Typically found in fairly dry, open country, including grassland and desert. In winter can be found in farmland and around lakes and reservoirs, typically scarce around immediate coast.	High Potential: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Falco columbarius</i> Merlin	None	GWL	Habitat includes Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally breeds in semi-open terrain having trees for nest sites and open areas for hunting. May winter in more open areas, such as grasslands, coastal marshes.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
Pandion haliatus Osprey	None	CWL	Rivers, lakes, coast. Found near water, either fresh or salt, where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around large lakes, reservoirs, rivers. Migrating Ospreys are sometimes seen far from water, even over the desert.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within freshwater/saline seasonal wetlands or wetland mitigation area to the south of the site along Line P.
<i>Asio otus</i> Long Eared Owl	None	CSC	Woodlands, conifer groves. Favored habitat includes dense trees for nesting and roosting, open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or deciduous trees in prairie country, streamside groves in desert. Generally avoids unbroken forest.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.

Scientific Name	Federal /	Other	Habitat Association	Potential for
Common Name	State Status	Status		Occurrence in Project
				area
				urcu
Dendroica petechia	None	CSC, BCC	Bushes, swamp edges, streams,	High
brewstri	None	СБС, БСС	gardens. In west, restricted to	Potential/Observed:
Diewshi			streamside thickets.	Has been observed
Yellow warbler			streamside tilexets:	
Tenow warbier				within neighboring
				Coyote Hills Regional
				Park. Project area may
				provide suitable
				foraging habitat within
				mixed riparian forest
				along Patterson Slough,
				or within cottonwood
				stands in the southern
				portion of the Project
				Area.
Eremophila alpestris	None	CWL	Prairies, fields, airports, shores, tundra.	High Potential: migrant
actia			Inhabits open ground, generally	bird that has been
			avoiding areas with trees or even	observed infrequently
California horned lark			bushes. May occur in a wide variety of	within neighboring
			situations that are sufficiently open:	Coyote Hills Regional
			short-grass prairies, extensive lawns (as	Park. Suitable foraging
			on airports or golf courses), plowed	habitat may be present
				within the ruderal
			fields, stubble fields, beaches, or lake	
			flats.	grasslands, or
				agricultural fields of the
				Project area.
	D 1 11			
Empidonax traillii	Federally		Bushes, willow thickets, brushy fields,	Moderate Potential:
extimus	Endangered		upland copses. Breeds in thickets of	species is a rare migrant
			deciduous trees and shrubs, especially	but has been observed
Southwestern Willow	State		willows, or along woodland edges.	in neighboring Coyote
Fly Catcher	Endangered		Often near streams or marshes	Hills Regional Park.
			(especially in southern part of range).	Project area may
				provide suitable habitat
				within the willow
				thickets / mixed
				riparian forest along
				Patterson Slough.
				_
MAMMALS				
Sorex vagrans	None	CSC	Resident of high marshland (2-3	No Potential: Suitable
halicoctes			MASL) of the south San Francisco	habitat is present in the
			Bay that contains scattered driftwood.	salt marshes
Salt Marsh			Suy that contains scattered unitwood.	surrounding the Project
Wandering Shrew				area. Poor habitat
" undering onew				suitability within the
				2
				Project area, species documented less than 2
				miles from Project area.
			1	l]

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Reithrodontomys</i> raviventris Salt Marsh Harvest Mouse	Federally Endangered State Endangered	CFP	Saline wetlands of the San Francisco Bay and its tributaries; associated with pickleweed	Low Potential: suitable marsh habitat (pickleweed) does not occur within the Project area/Park Expansion area. The species has been documented to occur in the saline seasonal wetlands north of Patterson ranch road, as well as to the west and south of the Project Area.
Antrozous pallidus Pallid Bat	None	CSC, WBWG High	Roosts along rocky outcrops, cliffs, oak trees, and is also known to utilize buildings and the underside of bridges as roosting sites.	Moderate Potential: Suitable roosting habitat is present within the Project area within, Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.
<i>Lasiurus blosevilli</i> Western Red Bat	None	CSC, WBWG High	Solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. Known to be very tolerant of human activity.	Moderate Potential: Suitable habitat within Project area is present along K/P line channels, in mixed riparian forest stands of Patterson Slough, and in farm buildings.
<i>Myotis thysanodes</i> Fringed Myotis	None	WBWG High Priority	Resident of various woodland habitats roosting in crevice or caves. Forages over open habitats and water bodies.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Myotis Volans Long Legged Myotis	None	WBWG High Priority	Inhabitant of various woodland habitats surrounding bodies of water and open habitats. Roosts in crevices or caves.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
Corynorhinus townsendii Townsend's Big- Eared Bat	None	CSC, WBWG High Priority	Migratory bat associated with various habitats throughout California including desert scrub, mixed conifer forest, or pine forest habitat Specifically associated with limestone caves, mines, lava tubes, and buildings.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
FISH	4			•
Oncorhynchus mykiss irideus	Federally Threatened		Very flexible life cycle patterns ranging from freshwater residents (non- migratory) to anadromous where	Low Potential: Unlikely to occur within the Project area, however
Steelhead (Central Coast ESU)	NMFS		adults travel upstream to the Russian river to spawn in cool, clear, well- oxygenated streams. Juveniles remain in these streams for at least 1 year before returning downstream through tributaries such as the Soquel Creek, or Pajaro River to the San Francisco and San Pablo Bay basins.	the flood control channels of Alameda Creek Flood Control Channel are documented as being utilized by steelhead. These lands are outside of the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the channel will need to consider impacts to this protected species.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
AMPHIBIANS				
Actinemys marmorata Western (Pacific) Pond Turtle	None	CSC	Resident of perennial ponds lakes, rivers and streams and even irrigation ditches. Requires suitable basking habitat (logs, floating vegetation) mud- banks, and a shelter that is submerged.	Moderate Potential: Pond turtles have been documented at the adjacent Coyote Hills Regional Park and at upstream (4.5 miles) sections of Alameda Creek. The species could potentially disperse into the Project area. Species has not been observed within the Project area; very limited egg laying sites are available.
<i>Rana draytonii</i> California Red- Legged Frog	Federally Threatened	CSC	Most common in lowlands or foothills. Found near ponds in humid forests, woodlands, grasslands, coastal shrub, and streamside with plant cover. Historically, found along the coast and Coast Ranges from Northern California to northern Baja California.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
Ambystoma californiense California Tiger Salamander	Federally Threatened State Threatened	CWL	Resident of grasslands and low foothills with pools or ponds that are necessary for breeding.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
INVERTEBRATES	I	I		
<i>Danaus plexippus</i> Monarch Butterfly	Federal Candidate	Roosts Protected by CDFW	Winter nesting habitat ranges from Mendocino to Baja California, Mexico along the California coast. Monarchs typically nest in wind protected groves (Eucalyptus, Monterey Pine, and Monterey Cypress) in locations with close proximity to nectar and water sources.	Moderate Potential: Documented roosting sites occur within 0.5 miles of the Project area and individuals may be observed during periods of the year foraging within the Project area. Mixed Riparian forest likely does not support a suitable habitat for roosting/overwintering -

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Lepidurus packardi</i> Vernal Pool Tadpole Shrimp	Federally Endangered		Reside in a wide variety of seasonal pools throughout the grasslands of the central valley. The water can be clear to murky and between 50-84 degrees Fahrenheit.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys
Branchinecta lynchi Vernal Pool Fairy Shrimp	Federally Threatened		Reside in a wide variety of seasonal pools including vernal pools, alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops within grassland habitat.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys

Key to Sensitive Wildlife Species Status Codes

	Federal				
FE	Federal Endangered				
FT	Federal Threatened				
FD	Federal Delisted				
FC	Federal Candidate				
FBGE	Federal Bald Eagle and Golden Eagle Protection Act				
BCC	USFWS Birds of Conservation Concern				
MMPA	Species protected under the Marine Mammal Protection Act				
NMFS	Species under the Jurisdiction of the National Marine Fisheries Service				
WBWG	Western Bat Working Group (High or Medium) Priority Species				
	State				
CE	California Endangered				
CT	California Threatened				
CSC	California Species of Special Concern				
CWL	California Watch List Species				
CFP	California Fully Protected				
CDE	California Candidate Endangered Species				
Species Evaluation					
No Potential: Hab	vitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate,				
	, plant community, site history, disturbance regime).				
Low Potential: Few of the habitat components meeting the species requirement are present, and/or the majority of habitat					
on and adjacent to the site is unsuitable or of very poor quality. The Species is not likely to be found on the site.					
Moderate Potentia	<u>It</u> : Some of the habitat components meeting the species requirements are present, and/or only some of				
also had been and an add	and the desired is second to be a second				

the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site. High Potential: All of the habitat components meeting the species requirements are present and/or most of the habitat on

or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Observed: Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Based on review of the biological literature of the region, information presented in previous site investigations and an evaluation of the habitat conditions of the Project area and surrounding vicinity, the following special status species presence criteria were developed for evaluating the presence of Special Status species within the Project area, as indicated in **Table 4.1-1**:

		ЕАЅТ	ВАУ	Y REGIONAL	PARK	DISTRICT
Соуоте	HILLS RES	ГОКАТ	ΓΙΟΝ	& PUBLIC A	ACCESS	S PROJECT
	Соммн	NTSA	AND	RESPONSES	FOR D	RAFT EIR

No Potential	(1) The species' specific habitat requirements are not present
	(2) The species is presumed, based on the best scientific information available, to be extirpated from the Project area or region.
Low Potential	(1) Species' known current distribution or range is outside of the Project area
	(2) Only limited or marginally suitable habitat is present within the Project area
Moderate Potential	(1) There is low to moderate quality habitat present within the Project area or immediately adjacent areas.
	(2) The Project area is within the known range of the species, even though the species was not observed during reconnaissance surveys.
High Potential	(1) Moderate to high quality habitat is present within the Project area
	(2) The Project area is within the known range of the species
	(3) The species was documented as occurring within the Project area during reconnaissance surveys or was observed within similar habitat adjacent to the project area.

Special Status wildlife species are shown in Table 4.1-1 and Figure 4-1.3.

TABLE 4.1-1 Special Status Wildlife Species

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
BIRDS				
<u>Melospiza molodia</u> <u>pusillula</u> <u>Alameda Song</u> <u>Sparrow</u>	None	<u>CSC, BCC</u>	Present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides.	High Potential: Individuals observed within the Southern Wetlands Natural Unit of the Project area as recently as January 2019 per ebird, as well as just below Patterson slough in April 2011. The Project area provides potential habitat for this species.
<u>Laterallus</u> j <u>amaicensis</u> <u>coturniculus</u> California Black Rail	<u>State</u> <u>Threatened</u>	BCC, CFP	Resident in marshland (saline to freshwater) with established, dense vegetation. Common in upper tidal zone of emergent wetlands or brackish marshes dominated by bulrush (<i>Scirpus</i> <i>spp.</i>), cordgrass (<i>Spartina spp.</i>), and pickleweed (<i>Salicornia spp.</i>), commonly found nesting in dense cover such as pickleweed. Prefers larger, undisturbed marshes close to a major water source.	Low Potential: <u>Individuals have been</u> <u>observed west of the</u> <u>Project area within</u> <u>adjacent Coyote Hills</u> <u>Regional Park. Unlikely</u> <u>to occur within Park</u> <u>Expansion Project area</u> <u>due to lack of suitable</u> <u>habitat.</u>

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Rallus longirostris obsoletus California Clapper (Ridgeway) Rail	State Endangered <u>Federal</u> Endangered	CFP	Endemic to large salt and brackish marshes; requires shallow areas, tidal channels, or mudflats for foraging.	Low Potential: Species has been observed west of Project area in Coyote Hills Regional Park as recently as December of 2018 per e-bird. Status of species breeding locations within Alameda county is undetermined, documented individuals may not have bred adjacent area. Project area does not contain suitable habitat.
<u>Accipiter cooperi</u> Cooper's Hawk	None	CWL	<u>Nests and breeds within mixed</u> riparian forests alongside creek banks. Forages in open grasslands, valleys, and foothills.	Moderate Potential: The mixed riparian forests, oak and willow clusters along Patterson Slough provide adequate nesting habitat for this species.
<u>Agelaius tricolor</u> Tricolored Blackbird	<u>State</u> <u>Threatened</u> (April 2018)	BCC, CSC	This species breeds within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes.	High Potential: Emergent freshwater thickets along Patterson Slough, K- line, and P-line channels provide nesting habitat. Species observed foraging and roosting along the P- line channel by H.T. Harvey in June of 2001.
Xanthocephalus xanthocephalus. Yellow headed blackbird	None	<u>CSC</u>	Migratory species that nests within emergent wetlands within dense thickets, deep water, and along the edges of lakes or large ponds. Forages on large aquatic insects during breeding season.	Low Potential: Rarely nests within the San Francisco Bay Area, Project area are not a sufficient breeding habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Athene cunicularia Burrowing Owl	None	BCC, CSC	Resident of open, dry grasslands/scrublands with low growing vegetation. Breeds, forages in open grasslands that contain small mammal burrows.	High Potential: Observed along the northern perimeter of the Project area during the winter of 2002- 2003 (Dexter, Wendy, May 10 th 2007.) Species has also been observed west of the Project area within Coyote Hills Regional Park.
<u>Elanus leucurus</u> White Tailed Kite	None	<u>CFP</u>	Resident of coastal/valley lowlands of California. Nests in isolated stands of large shrubs or trees, surrounded by open grassland. Preys on small mammals, birds, insects, reptiles, and amphibians.	High Potential: Observed foraging within the Project area during field surveys. Breeding habitat is present on site. Observed in 2000 and 2001 nesting within mixed riparian forests (H.T. Harvey & Associates 2001).
<u>Aquila chrysaetos</u> Golden Eagle	FBGE	<u>CFP, CWL,</u> <u>BCC</u>	Breeds and winters on cliff-walled canyons, and large trees within foothills, chaparral, sage-juniper flats mountain areas and deserts. Hunts mainly mammals in remote, open country from grasslands to steppes and mountainous areas.	High Potential: Occurs within the Coyote Hills Regional Park west of the project area and likely forages within the ruderal grasslands of the Project area.
<u>Circus cyaneus</u> <u>Northern Harrier</u>	None	<u>_CSC</u>	Nests within shrubby vegetation and forages in open grasslands, meadows, and wetlands.	High Potential: Nesting habitat present along the margins of Patterson Slough and the K-line and P-line channels. Suitable foraging habitat is present within the agricultural fields of the Project area. Species was observed in 2007, foraging, and documented breeding/nesting within Coyote Hills Regional Park.

Scientific Name	Federal /	Other		Potential for
Common Name	State Status	Status	Habitat Association	Occurrence in Project
				area
<u>Geothlypis trichas</u> <u>sinuosa</u> <u>Saltmarsh Common</u> <u>Yellowthroat</u>	None	<u>CSC, BCC</u>	Found in dense, mixed riparian thickets, and forests along waterways.	Moderate Potential: Suitable habitat and nesting grounds are present in the mixed riparian forest along Patterson Slough. Known to occur in Coyote Hills Park to the immediate west of the Project Area.
<u>Riparia riparia</u> Bank Swallow	<u>State</u> <u>Threatened</u>		<u>Migratory species to lowland and</u> <u>riparian habitats within coastal</u> <u>California. Nests in colonies along</u> <u>vertical cliffs with fine textured sandy</u> <u>soils near streams, lakes, or ocean.</u>	Low Potential: A possible colony was noted in a 1983 CNDDB observation within the Project area; no other individuals have been observed to date.
<u>Charadrius</u> <u>alexandrines nivosus</u> <u>Western Snowy Plover</u>	<u>Federally</u> <u>Threatened</u>	<u>CSC, BCC</u>	Resident of sandy beaches, salt pond levees and the banks of alkali lakes. Nesting habitat is sandy/gravely soils.	<u>No Potential: Project</u> <u>area does not contain</u> <u>suitable habitat for</u> <u>nesting.</u>
<i>Buteo regalis</i> Ferruginous Hawk	None	BCC	Preys upon lagomorphs (ground squirrels, mice, etc) within open grasslands, sage brush flats, desert scrub, and low foothills, valleys.	Moderate Potential: Suitable foraging habitat is present within the ruderal grassland of the Project area for wintering; species has not been documented to breed within Project area but has been observed within the adjacent Coyote Hills Regional Park.
<u>Falco peregrines</u> <u>anatum</u> <u>American Peregrine</u> <u>Falcon</u>	<u>Federally</u> <u>Delisted</u>	<u>CFP, BCC</u>	Resident species that forages within coasts, bays, marshes (primarily on waterbirds) and other wetland areas. Nests in protected cliff, ledges or manmade structures.	High Potential: Species has been observed in the north eastern corner of the project area along Paseo Padre Parkway in November of 2017, per e-bird. Individuals may be seen foraging or soaring over Project area.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Lanius Iudovicianus Loggerhead Shrike	None	<u>CSC, BCC</u>	Inhabit open woodland areas with short well-spaced vegetation, particularly those with spines or thorns.	High Potential: Has been observed within the project area in the Southern Wetlands Natural Unit in January of 2018, per e-bird.
<u>Asio flammeus</u> Short-eared Owl	None	CSC	Migratory species that can be found in grasslands and open areas. They perch in low trees or on the ground.	High Potential: Has been observed west of the Project area within Coyote Hills Regional Park as recently as January 2019. Potential foraging habitat may be present within the ruderal grassland habitat of the Project area.
<u>Icteria virens</u> <u>Yellow Breasted Chat</u>	None	<u>CSC</u>	Habitat consists of dense growth along waterways	Moderate Potential: <u>The mixed riparian</u> <u>forest along Patterson</u> <u>Slough may provide</u> <u>potential nesting /</u> <u>foraging habitat.</u>
Accipter striatus Sharp-shinned Hawk	None	CWL	Habitat includes mixed or coniferous forests, deciduous woodlands, and thickets. Often nests within groves of coniferous trees in mixed woods, sometimes in dense deciduous trees or pure coniferous forests with brush or clearings nearby. Tends to avoid open country	High Potential: Known to occur in the neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest and/or ruderal grassland.
<u>Falco mexicanus</u> <u>Prairie Falcon</u>	None	CWL	Resident of open hills, plains, prairies, deserts. Typically found in fairly dry, open country, including grassland and desert. In winter can be found in farmland and around lakes and reservoirs, typically scarce around immediate coast.	Moderate Potential: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project <u>area</u>
<i>Falco columbarius</i> <u>Merlin</u>	None	CWL	Habitat includes Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally breeds in semi-open terrain having trees for nest sites and open areas for hunting. May winter in more open areas, such as grasslands, coastal marshes.	Moderate Potential: <u>Has been observed</u> within neighboring <u>Coyote Hills Regional</u> Park. Project area may provide suitable foraging habitat within ruderal grassland.
<u>Pandion haliatus</u> <u>Osprey</u>	None	CWL	Rivers, lakes, coast. Found near water, either fresh or salt, where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around large lakes, reservoirs, rivers. Migrating Ospreys are sometimes seen far from water, even over the desert.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within freshwater/saline seasonal wetlands or wetland mitigation area to the south of the site along Line P.
<u>Asio otus</u> Long Eared Owl	<u>None</u>	CSC	Woodlands, conifer groves. Favored habitat includes dense trees for nesting and roosting, open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or deciduous trees in prairie country, streamside groves in desert. Generally avoids unbroken forest.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project <u>Area.</u>
Dendroica petechia brewstri Yellow warbler	None	<u>CSC, BCC</u>	Bushes, swamp edges, streams, gardens. In west, restricted to streamside thickets.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>Eremophila alpestris</u> actia California horned lark	None	CWL	Prairies, fields, airports, shores, tundra. Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of situations that are sufficiently open: short-grass prairies, extensive lawns (as on airports or golf courses), plowed fields, stubble fields, beaches, or lake flats.	High Potential: migrant bird that has been observed within neighboring Coyote Hills Regional Park. Suitable foraging habitat may be present within the ruderal grasslands, or agricultural fields of the Project area.
Empidonax traillii extimus Southwestern Willow Fly Catcher	<u>Federally</u> <u>Endangered</u> <u>State</u> <u>Endangered</u>		Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes (especially in southern part of range).	Moderate Potential: <u>species is a rare migrant</u> <u>but has been observed</u> <u>in neighboring Coyote</u> <u>Hills Regional Park.</u> <u>Project area may</u> <u>provide suitable habitat</u> <u>within the willow</u> <u>thickets / mixed</u> <u>riparian forest along</u> <u>Patterson Slough.</u>
Dendrocygna bicolor Fulvous Whistling Duck	None	<u>CSC</u>	Usually found in flocks; prefers marshes, marshy ponds, and flooded rice fields. Juvenile has contrasting dark wings and light belly. Vocal; frequently gives descending whistled calls with a stuttered beginning. Males sound wheezier, females more nasal and squeaky.	Low Potential: Individual observed west of the Project area within coyote hills regional park in March of 1970. Project area likely does not support suitable habitat for this species.
<u>Aythya Ameticana</u> <u>Redhead</u>	None	<u>CSC</u>	Gathers by the thousands on lakes or bays in the winter. Dives to reach submerged aquatic vegetation. Nests on marshy freshwater ponds and lakes. Slightly smaller than a Mallard with rounded, puffy head. Males have reddish-brown head, straw-yellow eye, and gray body. Females are plain brown overall; a lighter blonde color than scaup and Ring-necked Duck.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park in December of 2018, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Branta bernicla Brant	None	CSC	Small coastal goose that winters in saltmarshes, rocky coastlines, sheltered bays, and beaches. Black neck and breast, lighter sides and brownish back. White necklace and short black bill. Breeds in the Arctic tundra. Typically uncommon to rare inland. Almost always seen in flocks.	Moderate Potential: Individuals observed west of the Project area in Coyote Hills Regional Park in August of 2011. Suitable habitat may be present in the saltmarsh north of Tuibun trail.
<u>Bucephala islandica</u> Barrow's Goldeneye	None	<u>CSC</u>	Striking diving duck of coastal harbors, mountain lakes, and large rivers. Males are black-and-white with a white crescent in front of the eye. Females are gray with brown head and orangey bill.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park in January of 2019 and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.
<u>Chaetura vauxi</u> <u>Vaux's Swift</u>	None	CSC	Found in a variety of habitats, roosts in groups inside hollowed out trees, mixed forests, chimneys and other vertical openings. All-dark swift, often with slightly paler throat. Body is cigar shaped; flies with stiff, quick wing beats, often in small flocks. Western counterpart to Chimney Swift; essentially no range overlap during breeding season, but extensive overlap during migration through Central America.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park in September of 2018, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Mixed riparian forest of Patterson slough may provide suitable roosting habitat.
<u>Calypte costae</u> <u>Costa's</u> <u>Hummingbird</u>	None	BCC	Small hummingbird of desert habitats in Southwest U.S. and western Mexico. Compact and short-tailed with a slightly drooping bill. Male has a brilliant purple crown and throat that extends down to a point on each side; the purple coloration can appear black in poor lighting. Females are plainer with greenish back and dingy grayish under parts.	Low Potential: Individual observed west of the Project area within coyote hills regional park in September of 2008. Project area does not contain suitable shrub/desert habitat for nesting.

<u>Scientific Name</u>	Federal /	Other		Potential for
Common Name	State Status	<u>Status</u>	Habitat Association	Occurrence in Project area
<u>Selasphorus rufus</u>	None	BCC	Found in a variety of woodland	High Potential:
Rufous			habitats; more common in migration in suburbs, meadows, and other brushier areas. Feeds on nectar and	Individual observed west of the project area north of Patterson
Hummingbird			tiny insects. Adult males are almost entirely orange with bright white chest and some green on the back. Throat is iridescent, and depending on the light, can look anywhere from red to orange to yellow to lime green.	ranch road and Tuibun Trail in May of 2017. Additionally observed west of the Project area within Coyote Hills Regional Park as recent as September of 2017. Oak Savannah within Project area may provide suitable habitat.
<u>Antigone canadensis</u> Sandhill Crane	None	<u>CSC</u>	Often in large flocks at migration and wintering concentration points. Favors marshes and agricultural fields where	<u>Moderate Potential:</u> <u>Individual observed</u> west of the Project area
Sanonin Crane			they eat primarily grains. Large, long- legged bird shaped much like a heron. Gray body, sometimes with intense rusty staining. Adults have red crown.	within coyote hills regional park as recently as October of 2017. Ruderal grassland within the Project area may provide suitable habitat
<u>Numenius</u>	None	CWL, BCC	Found on beaches and open fields, solo or in flocks. Huge shorebird with	<u>High Potential:</u> Individuals observed
<u>americanus</u> Long-Billed Curlew			incredibly long, downturned bill used to probe into mud and snag invertebrates. Buffy overall with brighter cinnamon wings. Exceptional bill length and shape rules out other large shorebirds.	within the Southern Wetlands Natural Unit of the Project area within the Wetland Mitigation Area in January of 2017. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Ruderal grassland fields of Project area may provide suitable foraging habitat.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<i>Larus californicus</i> California Gull	None	CWL	Frequents open habitats, including parking lots, beaches, inland lakes, and open ocean. Scavenges opportunistically for scraps of food. Breeds inland on islands in lakes or rivers.	High Potential: Observed within the project area north of Patterson ranch road and Tuibun Trail in March of 2019 and additionally observed west of the Project area within Coyote Hills Regional Park as recent as March of 2019.
Hydroprogne caspia Caspian Tern	None	BCC	Feeds by cruising over lakes, rivers, estuaries, and reservoirs looking for fish, then plunging to catch them. Smooth wingbeats, more gull-like than choppy flight of small-bodied terns. Very vocal, giving loud raucous screams. Largest tern in the world. Thick, bright-red bill is distinctive. Note solid black cap in summer, which turns to black streaks in winter.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not suitable shoreline habitat for foraging.
<u>Thalasseus elegans</u> <u>Elegant Tern</u>	None	CWL	Long-billed tern of the Pacific coast, from the U.S. to Chile. Strictly coastal; commonly found on beaches and estuaries. Pale gray above with shaggy black cap in breeding plumage; nonbreeding birds develop white forehead. Best field mark is the slender orange bill with a slight droop.	Low Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as November 2015, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not contain suitable shoreline or large water body for foraging.

Scientific Name	Federal /	Other		Potential for
Common Name	State Status	Status	Habitat Association	Occurrence in Project area
Rynchops niger Black Skimmer	None	<u>CSC</u>	Found coastally, especially beaches and sandbars. Unusual tern-like bird with oversized bill—lower mandible is much longer than upper mandible. Feeds by flying close to surface of water and dipping its lower mandible into the water "skimming" for small fish.	Low Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as July 2016, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not contain suitable beach or sandbar habitat.
<u>Gavia immer</u> Common Loon	None	<u>CSC</u>	Large-bodied diving water bird, breeds on floating mats of vegetation on lakes and ponds in the boreal forest. In winter, mostly found on bays and open ocean, singly or in loose flocks. Breeding adults have gorgeous black- and-white patterning. During the winter, plain gray above and white below. Note heavy bill held straight. Dives to catch fish in deep, clear water.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as October of 2018. East of the Project area within the Ardenwood historic farm and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Individuals may be seen flying over the Project area, however Project area does not provide suitable habitat.
Phalacrocorax auritus Double-crested Cormorant	None	CWL	Can be in large flocks or solo. Most widespread cormorant across U.S. and Canada; also most likely to be seen inland. Dark body with orange bare skin at the base of the bill. Breeding adults are all black. Immatures and nonbreeders have paler breast. Dives underwater to catch fish. Swims like a duck in between dives.	High Potential: Individuals observed within the Southern Wetlands Natural Unit of the Project area in January of 2019. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.

<u>Scientific Name</u> Common Name	<u>Federal /</u> State Status	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Pelecanus erythrorhynchos American White Pelican	None	CSC	Typically breed on islands in shallow wetlands in the interior of the continent. They spend winters mainly on coastal waters, bays, and estuaries, or a little distance inland.	High Potential: Individuals observed within the Project area south of Patterson Slough in September of 2018. Additionally, individuals observed along the Tuibun trail at the western edge of the Project area in March of 2019.
<u>Pelecanus</u> <u>occidentalis</u> <u>Brown Pelican</u>	None	CFP	Large and conspicuous, gray-brown bird of saltwater habitats. Strictly coastal; rarely seen on inland lakes. Very long bill with pouch for scooping up fish. Forages mainly by diving on fish from above	Moderate Potential: Individuals observed within the southwestern portion of the Project area within the Wetland Mitigation Area in September of 2015 Individuals observed west of the project area in Coyote Hills Regional Park, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not provide suitable marsh habitat for foraging, may be seen flying overhead.
<u>Plegadis chihi</u> <u>White-faced Ibis</u>	None	CWL	Found mainly in shallow wetlands of the western U.S Long decurved bill. Dark overall with iridescent green and reddish tones on adults. Broad white border to reddish face and red eyes.	High Potential: Individuals observed within the Southern Wetlands Natural Unit portion of the Project area in January of 2017. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>Haliaeetus</u> <u>leucocephalus</u> Bald Eagle	California Endangered <u>Federally</u> Delisted	<u>CFP, BCC</u>	Scavenges and hunts near bodies of water. Adults have blackish-brown body with white head and tail.	Low Potential: Individuals observed west of the project area along Tuibun trail in December of 2016 Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm, and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Project area does not contain suitable water bodies for foraging, individuals may be seen flying over Project area.
<u>Buteo swainsoni</u> <u>Swainson's Hawk</u>	<u>State</u> <u>Threatened</u>	BCC	Found in prairies and agricultural regions of western U.S. and Canada in warm months. Winters in South America and along Pacific coast of Central America. Extremely rare in U.S. in winter. Varies in color from rather pale with white belly to completely brown. Light morph is more common with brown breast band contrasting with white throat and belly.	Moderate Potential: Individuals observed west of the project area in Coyote Hills Regional Parka as recently as November of 2012, east of the Project area within the Ardenwood historic farm and to the south near Don Edwards San Francisco Bay National Wildlife Refuge. Ruderal grassland within Project area may provide suitable foraging habitat.

Scientific Name Common Name Contopus cooperi Olive-sided Flycatcher	Federal / State Status	Other Status	Habitat Association Feeds on insects. Breeds in clearings and bogs in boreal or mountainous forests, but can be found in migration in open habitats with a mixture of woods and clearings. From the front, look for dark sides creating a vest, with a bright white stripe from throat to belly. White patches on the sides of rump are sometimes visible from behind.	Potential for Occurrence in Project <u>area</u> High Potential: Individuals observed just south of Patterson Slough in June of 2016. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm (May 2018), and to the south near Don Edwards San Francisco
Empidonax traillii Willow Flycatcher	<u>State</u> Endangered	BCC	Western population prefers understory in riparian woods. Prefers shrubby open areas, especially around marshes. Wings dark with distinct white wingbars (brownish in Western population).	Bay National Wildlife Refuge. Moderate Potential: Individuals observed in southern portion of project area within the Wetlands Mitigation Area in September of 2015. Suitable habitat may be present within Patterson Slough. Additionally, individuals observed west of the project area in Coyote Hills Regional Park, east of the Project area within the Ardenwood historic farm (9/18), and to the south near Don Edwards San Francisco Bay National Wildlife Refuge.
<u>Spinus lawrencei</u> Lawrence's Goldfinch	None	BCC	Found in open grassy woodland. Uncommon, but sometimes travels in large flocks, especially in fall and winter. Highly erratic, moves around a lot from year-to-year. Feeds on seeds. Unique among goldfinches because of its mostly gray body. Male has black forehead and throat, yellow breast, and complex black and yellow pattern on wings.	Low Potential: <u>Individual was</u> <u>observed in march of</u> 2008 to the west of the <u>project area within</u> <u>Coyote Hills Regional</u> <u>Park. Oak Savannah /</u> <u>ruderal grasslands of</u> <u>project area may</u> <u>provide suitable</u> <u>foraging habitat.</u>

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Ammondramus savannarum Grasshopper Sparrow	None	<u>CSC</u>	Small, short-tailed, flat-headed sparrow found in weedy grasslands. Warm buffy coloration with clean unstreaked breast. Thin white eyering and yellow patch above eye. Back and wings are patterned with gray and rufous. Typically not in flocks.	Moderate Potential: Individual observed west of the Project area within Coyote Hills Regional Park in September of 2018. Suitable foraging habitat may exist within ruderal grasslands of Project Area.
MAMMALS	·	·		
<u>Sorex vagrans</u> <u>halicoetes</u> <u>Salt Marsh</u> <u>Wandering Shrew</u>	None	<u>CSC</u>	Resident of high marshland (2-3 MASL) of the south San Francisco Bay that contains scattered driftwood.	No Potential: Suitable habitat is present in the salt marshes surrounding the Project area. Poor habitat suitability within the Project area, species documented less than 2 miles from Project area.
<u>Reithrodontomys</u> <u>raviventris</u> <u>Salt Marsh Harvest</u> <u>Mouse</u>	Federally Endangered State Endangered	CFP	Saline wetlands of the San Francisco Bay and its tributaries; associated with pickleweed	Low Potential: suitable marsh habitat (pickleweed) does not occur within the Project area/Park Expansion area. The species has been documented to occur in the saline seasonal wetlands north of Patterson ranch road, as well as to the west and south of the Project Area.
<u>Antrozous pallidus</u> Pallid Bat	None	<u>CSC,</u> WBWG <u>High</u>	Roosts along rocky outcrops, cliffs, oak trees, and is also known to utilize buildings and the underside of bridges as roosting sites.	Moderate Potential: Suitable roosting habitat is present within the Project area within, Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>Lasiurus blosevilli</u> <u>Western Red Bat</u>	None	CSC, WBWG High	Solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. Known to be very tolerant of human activity.	Moderate Potential: Suitable habitat within Project area is present along K/P line channels, in mixed riparian forest stands of Patterson Slough, and in farm buildings.
<u>Myotis thysanodes</u> Fringed Myotis	None	<u>WBWG</u> High Priority	Resident of various woodland habitats roosting in crevice or caves. Forages over open habitats and water bodies.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
<u>Myotis Volans</u> Long Legged Myotis	None	<u>WBWG</u> <u>High Priority</u>	Inhabitant of various woodland habitats surrounding bodies of water and open habitats. Roosts in crevices or caves.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
<u>Corynorhinus</u> <u>townsendii</u> <u>Townsend's Big-</u> <u>Eared Bat</u>	None	<u>CSC</u> , <u>WBWG</u> <u>High Priority</u>	Migratory bat associated with various habitats throughout California including desert scrub, mixed conifer forest, or pine forest habitat Specifically associated with limestone caves, mines, lava tubes, and buildings.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
<u>FISH</u>				
<u>Oncorhynchus</u> <u>mykiss irideus</u> <u>Steelhead (Central</u> <u>Coast ESU)</u>	Federally Threatened NMFS		Very flexible life cycle patterns ranging from freshwater residents (non- migratory) to anadromous where adults travel upstream to the Russian river to spawn in cool, clear, well- oxygenated streams. Juveniles remain in these streams for at least 1 year before returning downstream through tributaries such as the Soquel Creek, or Pajaro River to the San Francisco and San Pablo Bay basins.	Low Potential: Unlikely to occur within the Project area, however the flood control channels of Alameda Creek Flood Control Channel are documented as being utilized by steelhead. These lands are outside of the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the channel will need to consider impacts to this protected species.
AMPHIBIANS				
Actinemys marmorata Western (Pacific) Pond Turtle	None	CSC	Resident of perennial ponds lakes, rivers and streams and even irrigation ditches. Requires suitable basking habitat (logs, floating vegetation) mud- banks, and a shelter that is submerged.	Moderate Potential: Pond turtles have been documented at the adjacent Coyote Hills Regional Park and at upstream (4.5 miles) sections of Alameda Creek. The species could potentially disperse into the Project area. Species has not been observed within the Project area; very limited egg laying sites are available.
<u>Rana draytonii</u> <u>California Red-</u> <u>Legged Frog</u>	Federally Threatened	CSC	Most common in lowlands or foothills. Found near ponds in humid forests, woodlands, grasslands, coastal shrub, and streamside with plant cover. Historically, found along the coast and Coast Ranges from Northern California to northern Baja California.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.

<u>Scientific Name</u> Common Name	<u>Federal /</u> <u>State Status</u>	<u>Other</u> <u>Status</u>	Habitat Association	Potential for Occurrence in Project area
Ambystoma californiense California Tiger Salamander	Federally Threatened <u>State</u> Threatened	CWL	Resident of grasslands and low foothills with pools or ponds that are necessary for breeding.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
INVERTEBRATES				
Danaus plexippus Monarch Butterfly	<u>Federal</u> <u>Candidate</u>	Roosts Protected by CDFW	Winter nesting habitat ranges from Mendocino to Baja California, Mexico along the California coast. Monarchs typically nest in wind protected groves (Eucalyptus, Monterey Pine, and Monterey Cypress) in locations with close proximity to nectar and water sources.	Moderate Potential: Documented roosting sites occur within 0.5 miles of the Project area and individuals may be observed during periods of the year foraging within the Project area. Mixed Riparian forest likely does not support a suitable habitat for roosting/overwintering -
<u>Lepidurus packardi</u> <u>Vernal Pool Tadpole</u> <u>Shrimp</u>	Federally Endangered		Reside in a wide variety of seasonal pools throughout the grasslands of the central valley. The water can be clear to murky and between 50-84 degrees Fahrenheit.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys
<u>Branchinecta lynchi</u> <u>Vernal Pool Fairy</u> <u>Shrimp</u>	<u>Federally</u> <u>Threatened</u>		Reside in a wide variety of seasonal pools including vernal pools, alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops within grassland habitat.	Low Potential: <u>Marginal habitat is</u> present, however, the <u>species was not</u> <u>observed in the Project</u> <u>area during previous</u> <u>protocol biological</u> <u>surveys</u>

•	Federal
<u>FE</u>	Federal Endangered
<u>FT</u>	Federal Threatened
FD	Federal Delisted
FC	Federal Candidate
FBGE	Federal Bald Eagle and Golden Eagle Protection Act
BCC	USFWS Birds of Conservation Concern
<u>MMPA</u>	Species protected under the Marine Mammal Protection Act
<u>NMFS</u>	Species under the Jurisdiction of the National Marine Fisheries Service
WBWG	Western Bat Working Group (High or Medium) Priority Species
	State
CE	California Endangered
CT	California Threatened
CSC	California Species of Special Concern
CWL	California Watch List Species
<u>CFP</u>	California Fully Protected
CDE	California Candidate Endangered Species
Species Evalua	tions:
No Potential:	Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate,
elevation, hydrol	logy, plant community, site history, disturbance regime).
	Few of the habitat components meeting the species requirement are present, and/or the majority of habitat
on and adjacent	to the site is unsuitable or of very poor quality. The Species is not likely to be found on the site.
	ntial: Some of the habitat components meeting the species requirements are present, and/or only some of
	r adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
	: All of the habitat components meeting the species requirements are present and/or most of the habitat on
or adjacent to th	e site is highly suitable. The species has a high probability of being found on the site.

Key to Sensitive Wildlife Species Status Codes

Observed: Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Page 90

The second paragraph is revised as follows:

A number of Special Status Species surveys were conducted during the planning and environmental review work completed for the Patterson Ranch Planned District project as well as monitoring and observation conducted by the Project Biologist during the Phase I Ardenwood Creek Flood Control and Restoration Project. Previous biological surveys (Appendix E) included:

Page 91

The Bank Swallow/Burrowing Owl discussions are edited as follows:

Bank Swallow (Riparia, riparia) - State Threatened, California Threatened

Bank swallows (*Riparia riparia*) have a very wide distribution throughout the world, but in California are concentrated primarily along the Sacramento and Feather rivers. Their nesting habitat consists of vertical caves, sand banks, and along marshes and river banks. Within the Project area, this species are known to occur to the west within Coyote Hills Regional Park; however observed occurrences are rare and they have not been observed or confirmed to be present within the Project area.

Non-Special Status species of swallow are more commonly observed within the Project area, and include: cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), and barn swallow (*Hirunodo rustica*) species. Cliff swallows (a non-listed migratory species) were observed nesting within the Paseo Padre Parkway – Ardenwood Creek/Line P culvert during Pre-construction Biological surveys completed for the ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area project 2016. These cliff swallow nests are protected under the Migratory Bird Treaty Act of 1918 Section 703 and were accordingly protected from disturbance during construction of the culvert.

Burrowing Owl (Athene cunicularia) - CDFW Species of Special Concern

Burrowing Owl (BO) are endemic to the grasslands, rangelands, disturbed agricultural areas, and deserts of North America. BO nest and roost within underground burrows such as those excavated by ground squirrels, prairie dogs, and gophers. Nesting season begins in late March or April. Unlike other owls, the BO is frequently active during the day but accomplish the majority of their hunting at night, preying upon small rodents, and insects. BO has been observed within the Project area, and in the neighboring Coyote Hills Regional Park. The ruderal grasslands, and agricultural fields within the Project Area provide suitable nesting and foraging habitat for this species.

Non-Special Status species of swallow are more commonly observed within the Project area, and include: cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), and barn swallow (*Hirunodo rustica*) species. Cliff swallows (a non-listed migratory species) were observed nesting within the Paseo Padre Parkway – Ardenwood Creek/Line P culvert during Pre construction Biological surveys completed for the ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area project 2016. These cliff swallow nests are protected under the Migratory Bird Treaty Act of 1918 Section 703 and were accordingly protected from disturbance during construction of the culvert.

Page 93

The description of Tricolored Blackbird is edited as follows:

Tricolored Blackbird (*Agelaius tricolor*) – <u>California Threatened</u>, USFWS Bird of Conservation Concern, CDFW Species of Special Concern

Page 101

The following paragraph is added after the first paragraph under the San Joaquin spearscale (Etriplex joaquinana) (CNPS 1B.2) heading:

Four discrete areas of rare plants were observed during Jane Valerius' 2016 rare plant survey during the summer of 2016 of the Southern Wetlands Natural Unit. Each of the four separate geographic areas contains between six and 12 rare plants.

Page 108

The 16th bullet point of Mitigation Measure BIO-1a is revised as follows:

• Whenever possible, steep-walled holes or trenches shall be covered each evening to prevent animal entry. If this is not possible and the steep-walled holes or trenches must be left open overnight, escape ramps or structures shall be installed. Before sSteep-walled holes or trenches are backfilled, they shall be inspected for trapped animals on a daily basis until they are back-filled. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted immediately to determine the appropriate method for relocation. The Qualified Biologist may elect to order a stop work requirement if they determine it to be necessary, and upon consultation with the appropriate regulatory agency.

Page 109

The second bullet of Mitigation Measure BIO-1b is edited as follows:

• To facilitate preparation of the Plan, the Park District shall, prior to construction, have a <u>qualified</u> botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species, and comply with botanical survey requirements of Mitigation Measure BIO-1c.

Mitigation Measure BIO-1b is amended to add the following after the second bullet point:

- <u>East Bay Regional Park District shall be the responsible party for preparation and implementation of the HMMP for work/impact mitigation within the Patterson Slough and Western Wetlands Natural Units, the Ranch Road Recreation Unit, and the Historic Patterson Farm Agricultural Unit. Alameda County Flood Control and Water Conservation District (ACFCWCD) shall be the responsible party for HMMP implementation within the Southern Wetlands Natural Unit. Achievement of performance standards shall be based on comparison with impacted sensitive habitat, as required by regulatory permits for the project. Reference sites of impacted sensitive habitat shall be surveyed for biological resources and documented prior to earthwork.</u>
- <u>Habitat Compensation Measures:</u>
 - <u>Temporarily disturbed ruderal areas shall be stabilized to control erosion and dust</u> production prior to restoration or enhancement.
 - o Disturbed or impacted wetlands shall be compensated at a 2:1 ratio.
 - Disturbed or impacted areas containing rare or Special Status plants that cannot be avoided shall be compensated at a 3:1 ratio.

- Disturbed or impacted mixed riparian and oak woodland plant communities located within Patterson Slough shall be compensated for at a 3:1 ratio. Work includes re-seeding, replanting, and weed control using PM methods.
- <u>Performance Standards:</u>
 - Existing ruderal/disturbed areas shall have a minimum 70% cover of grasses and forbs within one year of seeding.
 - Wetland areas shall have a minimum 70% relative cover of wetland plants after seven years. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
 - Willow and mixed riparian forest areas that provide compensation for disturbance to their habitats shall have a minimum 50% native plant survival and have achieved a minimum 60% canopy cover within ten years of planting. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
 - Invasive plants that are listed as High invasive threat by the California Invasive Plant Council (Cal-IPC), exclusive of non-native grasses, shall not exceed a 5% cover after seven years.
- Monitoring and Reporting:

Monitoring will include a combination of photographic monitoring from permanent photo points and random sampling of the vegetative community using a one-square yard sampling frame (quadrat) at permanent vegetation monitoring stations within each target vegetation community, including control sites for each vegetation community. Permanent sampling locations will be located with posts within each vegetation community following completion of final grading, seeding, and planting. One permanent sampling location will also be established within each reference vegetation community located within the project area. Plant species and their absolute percent (%) cover will be recorded within three randomly located quadrats at each sampling location, including the reference vegetation communities. Sampling will occur once per year at the end of the wet season, typically in late spring or early summer (May-June) or as timing corresponds with the time when the majority of species will be identifiable.

- <u>Reporting shall occur at years 1, 3, 5, 8 and 10 following construction. If performance standards have been met at year five, the monitoring and reporting can be concluded.</u>
- <u>Remedial Measures and Contingencies:</u>
 - o If the annual monitoring of percent survival and cover indicate that target performance and success criteria, or if health and vigor observations so indicate, and as determined by the Qualified Biologist remedial measures shall be undertaken. These can include re-seeding, mulching, irrigation, replanting, pest control, or relocating target vegetation cover as necessary to achieve the performance criteria. Native plants determined to not be successful may be substituted using comparable native trees, shrubs, vines, and herbaceous species that have demonstrated successful growth and establishment.

Page 110

The first paragraph of Mitigation Measure BIO-1c is revised as follows:

Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species: The Park District, and its Construction Contractors, and restoration and maintenance personnel will implement measures to avoid and minimize potential adverse effects on Special

Status plants, with a special focus on the Southern Wetlands Natural Unit. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.

Page 111

The eighth bullet point of Mitigation Measure BIO-1c is edited as follows:

• If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 3:1 ratio based on the area of lost habitat (accurately field measured) or as determined by the Qualified Biologist and Park District biologists, in consultation with CDFW, which has review and approval authority over a Rare Plant Mitigation Plan/Habitat Mitigation and Monitoring Plan. Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas.

Page 117

To clarify, the last sentence of the first paragraph is amended as follows:

Take is defined under CESA (<u>California Endangered Species Act</u>) as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.".

Page 118

Mitigation Measure BIO-1*i* is amended to add the following after the last bullet point:

• To compensate for any loss of bat roosts within Patterson Slough, the Park District shall install artificial bat roosts (bat houses) when an existing bat roost is lost. The artificial bat roost(s) shall be of such a type and quantity as to provide sufficient replacement roosts for all of a displaced colony. All work, including design and location of artificial roosts and other mitigation measures shall be completed by a Qualified Biologist experienced with bats, including conducting bat surveys and preparing bat protection and mitigation plans Where Special Status bats are found to be present, the Qualified Biologist shall consult with CDFW.

Page 124

The following is added to page 124 of the EIR, inserted after 4th paragraph from the top

As indicated in the Project Description on page 42 of the DEIR, dogs are permitted on leash only and on trails only and other paved/improved areas in less sensitive habitat areas, such as restored oak savanna and enhanced grasslands. All dogs will be precluded from existing and restored willow sausal and mixed riparian forest areas such as along and adjacent to Patterson Slough, and from existing and restored wetlands, such as the Southern Wetlands Natural Unit. Since dogs are not allowed in sensitive areas and new proposed trails and visitor serving facilities are typically setback at least 100 feet from the edge of adjacent sensitive habitat, and/or are screened using fencing, landscaped berms, the potential impacts of dogs on sensitive habitat and special status birds, migratory birds, and waterfowl is less than significant.

Page 125

To correct a typographical error, the first sentence of the fourth paragraph is revised as follows:

There are three City of Fremont (local) ordinances that provide for protection of biological resources: 1) Tree Protection Ordinance), 2) Watercourse (stream) Protection Ordinance, and 3) Standard Development Requirements to Protect Resources.

Page 135

The following paragraph is inserted below the heading "City of Fremont Municipal Code", and above the last paragraph:

A Conditional Use Permit is required for the adaptive reuse of an historic building, as stipulated in Table 18.55.110 of the Fremont Municipal Code.

Page 142

Mitigation Measure CUL-1b is revised as follows:

Mitigation Measure CUL-1b: If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitating Historic Buildings (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont. <u>A</u> <u>Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code.</u>

Page 143

The fifth paragraph is revised as follows:

Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would cause a substantial adverse change to this <u>Historic Resource historic building</u> on the Project site. This represents a *potentially significant* impact.

Page 143

Mitigation Measure CUL-2a is revised as follows:

Mitigation Measure CUL-2a: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interiorqualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board. The documentation materials shall be placed on file with the City of Fremont, the Washington Township Museum of Local History, and the Fremont Main Library.

Page 145

Mitigation Measure CUL-5 is revised as follows:

Mitigation Measure CUL-5: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have

been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the <u>coronerPark District and/or its contractors</u> shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The most likely descendant shall have 48 hours after being allowed access to the site to make recommendations for disposition of the remains and associated grave goods.

Appendix A, Page 40

Mitigation Measure AIR-1 is revised as follows:

AIR-1 The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:

- 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The EBRPD's phone number shall also be visible to ensure compliance with applicable regulations.

The following measures, contained in Table 8-3 of the Bay Area Air Quality Management District's May 2017 California Environmental Quality Act Guidelines, also shall be included in the Project construction dust/emission control plan:

- 1. <u>All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.</u>
- 2. <u>All excavation, grading, and/or demolition activities shall be suspended when average wind speeds</u> exceed 20 mph.
- 3. <u>Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.</u>
- 4. <u>Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas</u> as soon as possible and watered appropriately until vegetation is established.
- 5. <u>The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities</u> on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of <u>disturbed surfaces at any one time.</u>

- 6. <u>All trucks and equipment, including their tires, shall be washed off prior to leaving the site.</u>
- 7. <u>Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.</u>
- 8. <u>Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</u>
- 9. <u>Minimizing the idling time of diesel powered construction equipment to two minutes.</u>
- 10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- 11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- 12. <u>Requiring that all construction equipment, diesel trucks, and generators be equipped with Best</u> <u>Available Control Technology for emission reductions of NOx and PM.</u>
- 13. <u>Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.</u>

Appendix E

The following Appendix E cover sheet and subsequent reports are added at the end of the DEIR:

<u>Appendix E</u>

Special Status Species Studies:

- <u>California Red-Legged Frog (CRLF) surveys of Patterson Slough and Line P by Pacific Biology (Sept. 2007) and H.T. Harvey (Aug. 2001).</u>
- California Tiger Salamander (CTS) by and H.T. Harvey (Aug. 2003) and Condor Country Consulting (2003).
- Vernal Pool Fairy Shrimp (VPFS) by Condor Country Consulting (Nov. 2003) and Helm Biological Consulting (Feb. 20014).
- Burrowing owl (BO) by Pacific Biology (July 2007) and H.T. Harvey (Aug. 2001).
- Hawks and other Birds of Prey observed by H.T. Harvey 2001, 2002, 2003).
- Jane Valerius Environmental Consulting Ardenwood Plant Survey Letter (July 28, 2016)



PATTERSON RANCH BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

Prepared by:

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ecember 4, 2001 (revised 2 April 2004)

Project No 657-08

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I. INTRODUCTION

Patterson Ranch is located in west-central California within the boundaries of the City of Fremont, Alameda County, California (Figure 1). General wildlife and botanical surveys were conducted on the property during the summer and winter of 2000. Species-specific surveys for a variety of wildlife species were conducted on site from May through July of 2001, and surveys to map biotic habitats were conducted during October 2001. Additional surveys were conducted for the California tiger salamander from December 2002 through April 2003. Condor Country Consulting (2003) conducted wet season surveys for special-status branchiopods, and soil samples were analyzed for cysts of these species (Helm Biological Consulting 2004). The purpose of these surveys was to document biotic resources that may potentially pose constraints to development and to provide information on the biological resources associated with the site. Specifically, surveys were conducted to describe biotic habitats and to determine whether the site supports special-status species and/or their habitat.

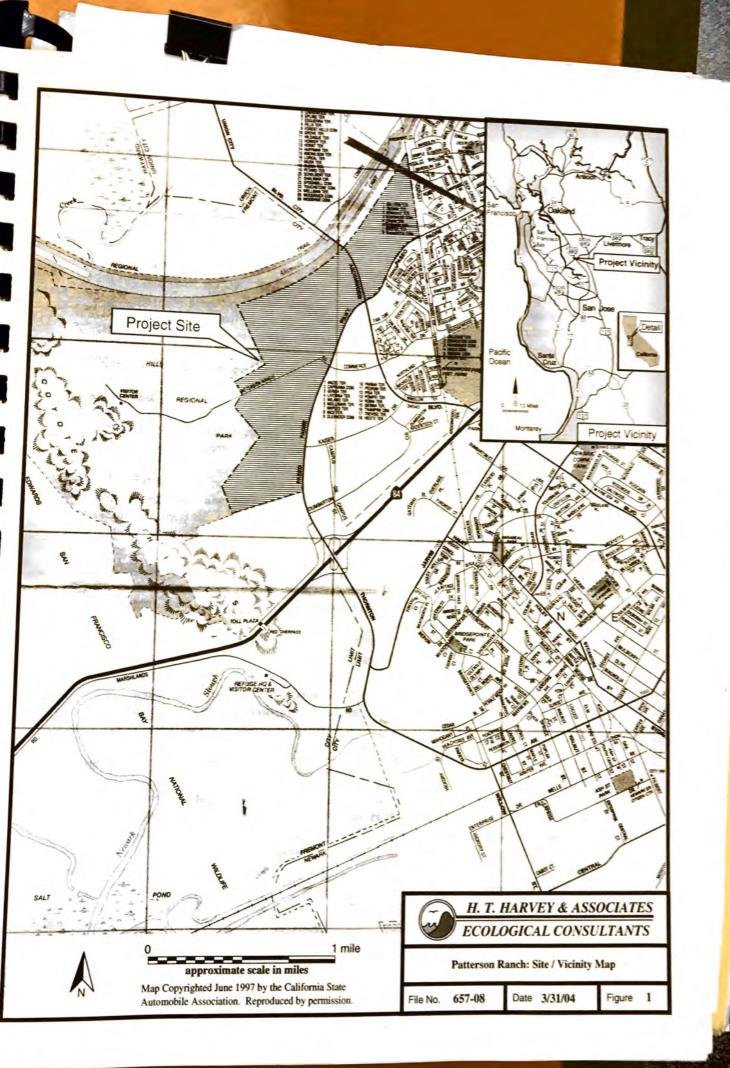
A. GENERAL AREA DESCRIPTION

The 427-acre study area is located immediately west of Paseo Padre Parkway and south of the flood control channels (Alameda Creek and the parallel "K" Line) maintained by the Alameda County Flood Control and Water Conservation District (ACFCWCD). Property owned by Cargill abuts the southern boundary and a residential neighborhood occurs along the eastern boundary separated by a railroad from the study area. The East Bay Regional Park District (EBRPD) owns the land adjacent to the site on the west side, north of Patterson Ranch Road. South of that road on the west side of the site is land owned by the ACFCWCD, but managed as open space by EBRPD.

Elevation does not vary significantly across the site and averages approximately 10 feet National Geodetic Vertical Datum. The topography of the site slopes gently to the west and northwest. The average annual precipitation for the adjacent city of Newark is approximately 13.64 inches per year (Soil Conservation Service [SCS] 1981).

A flood control channel ("P-line") bisects the southern portion of the site. Patterson Slough follows a meandering course in a northwesterly direction across the central portion of the site, which used to flow into Alameda Creek before the EBRPD built the "Dust Marsh" that dammed up the natural flow from Patterson Slough. The "K-line," another flood control channel (also known as Crandall Creek), is on the northern perimeter of the site and crosses the eastern portion of the property. The EBRPD owns a 100-foot wide strip of land between the site and the "K-line" on the west side of Ardenwood Boulevard. A public trail is in that strip of land.

Patterson Ranch has been maintained in agricultural production for more than fifty years. During this period the entire site, except for creek and slough, has been intensively farmed with the soil planted and tilled one or more times every year, reducing use of the site by many species of wildlife.



II. BIOTIC HABITATS

The following section is provided as background information in order to facilitate a discussion of existing biotic resources on site and to describe special-status species habitats that may occur.

The site supports three biotic habitats including agricultural fields, mixed riparian and aquatic freshwater emergent habitat. Roads and the farm machinery storage yard comprise developed areas on site (Figure 2). Where appropriate, the communities have been named based on Holland's system of classification (1986) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Habitats on site were mapped with the aid of aerial photographs.

A. AGRICULTURAL FIELDS

1. Vegetation

Agricultural fields habitat occupies the vast majority of the study area (Figure 2). These fields and surrounding agricultural access roads comprise recently disked areas characterized by bare, disturbed soils that currently support little vegetation. Agricultural fields on the property are managed to produce corn (Zea mays), alfalfa (Medicago sativa), and gladiolas (Gladiola spp.). Portions of the site have been grazed in the past. Numerous, scattered patches of ruderal vegetation too small to map occur around the margins of agricultural fields throughout the study area. The majority of the ruderal vegetation on the property consists of disturbance-oriented, non-native, herbaceous species. These include Harding grass (Phalaris aquatica), Italian wild rye (Lolium multiflorum), rabbitsfoot grass (Polypogon monspeliensis), curly dock (Rumex crispis), prickly ox-tongue (Picris echioides), wild lettuce (Lactuca serriola), field mustard (Brassica rapa), wild oats (Avena fatua), and wild radish (Raphanus sativus).

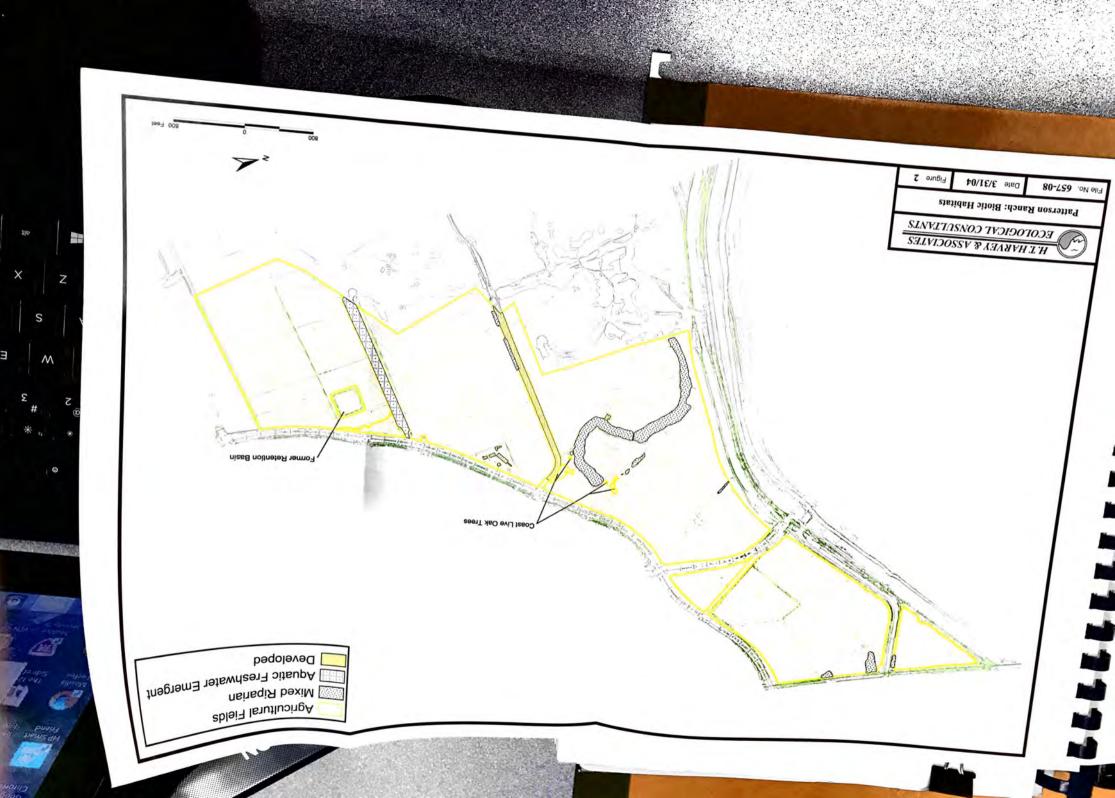
Several features occur within these agricultural fields, but have not been mapped as separate habitats. Several large coast live oaks (*Quercus agrifolia*) are found near the intersection of Patterson Ranch Road and Paseo Padre Parkway, but with a disked understory, they do not constitute a separate habitat type. Similarly, a former detention basin in the southern portion of the site was mapped as disked agricultural land, as it is no longer used for water retention. This feature was removed in the winter of 2003-04.

2. Wildlife

Virtually the entire site is planted each year as it has been since at least the 1950's. These disked fields offer little in the way of wildlife habitat, as both food and shelter are either scarce or absent from these areas. Mourning doves (Zenaida macroura), Rock doves (Columba livia), Brewer's Blackbird (Euphagus cyanocephalus), and Cliff Swallows (Petrochelidon pyrrhonota) were all observed flocking in these areas to forage on invertebrates that have been turned over by disking. The Loggerhead Shrike (Lanius ludovicianus) and American Kestrel (Falco sparverius), as well as Turkey Vultures (Cathartes aura) were all observed foraging in this habitat type.

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H. T. Harvey & Associates 2 April 2004



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Upon occasion in the past, these fields have been fallowed, although for only a single planting season. When fallow, the fields on site are overgrown with dense vegetation that covers most of the ground surface. These fields can offer good habitat to wildlife, particularly small mammals that can live under the vegetation and therefore be protected from predation. The California ground squirrel (*Spermophilus beecheyi*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*) all may use this dense cover for shelter and nesting. Gopher snakes (*Pituophis melanoleucus*) make use of mammal burrows for shelter and reproduction. Bird species are somewhat limited but include the American Goldfinch (*Carduelis tristis*), Song Sparrow (*Melospiza melodia*), and various birds that are associated with the adjacent remnant riparian corridor. The insects and small mammals that inhabit these areas make them excellent foraging habitat for Red-tailed Hawks (*Buteo jamaicensis*), White-tailed Kites, and other birds of prey.

The fields offer foraging opportunities for a number of bird and mammal species. California ground squirrels are abundant in these areas, and western fence lizards (*Sceloporus occidentalis*) make use of their burrows for shelter. Bird species include those listed for disked fields, in addition to Killdeer (*Charadrius vociferous*), Great Egrets (*Casmerodius albus*), and Red-winged Blackbirds (*Agelaius phoeniceus*).

The riparian vegetation associated with Patterson Slough (Figure 2) allows riparian associated wildlife species access to adjacent agricultural fields. During wetter periods, Pacific tree frogs (*Hyla regilla*), western toads (*Bufo boreas*), and garter snakes (*Thamnophis* spp.) may forage here. Great Blue Herons (*Ardea herodias*), Great Egrets, Snowy Egrets (*Egretta thula*), and raccoons (*Procyon lotor*) also forage at the edge of this habitat. Once the area dries out, blackbirds and other species foraging over the agricultural fields will move into this area as well.

B. MIXED RIPARIAN

1. Vegetation

Mixed riparian habitat occurs along the opposing banks of Patterson Slough, and directly adjacent to Patterson Ranch Road in the central portion of the property (Figure 2). The mixed riparian habitat adjacent to Patterson Ranch Road is supported largely by seasonal hydrology, and is associated with a ditch that lines the south side of the road. Two patches of remnant riparian habitat also occur in the northern portion of the study area. These riparian patches occur within two isolated, shallow depressions that do not support ponded water during the year including the winter rainfall period.

The multi-layered tree canopy includes an overstory dominated by western sycamore (*Platanus racemosa*), arroyo willow (*Salix lasiolepis*), and coast live oak (*Quercus agrifolia*). Understory shrubs include blackberry (*Rubus* sp.), American dogwood (*Cornus sericea* ssp. sericea), and poison oak (*Toxicodendron diversilobum*). Broad-leaved cattail and bur reed also occur within portions of this habitat type. The two patches of remnant riparian habitat in the northern portion of the property are dominated by arroyo willow.

2. Wildlife

The riparian forests along Patterson Slough and adjacent areas that have dense willows and oaks provide important habitat that has largely disappeared from the lower Alameda Creek areas. Willow thickets provide foraging habitat for many species of migrant songbirds and breeding habitat for several species including the Salt Marsh Common Yellowthroat (*Geothlypis trichos sinuosa*) a California species of special concern. In addition, the riparian habitats of Coyote Hills and nearby areas are fairly isolated from other areas of favorable habitat and migrant birds flying over the bay and general region are especially attracted to them. Thus, these areas represent high-value habitats for neo-tropical migrants. Pacific tree frogs and western toads breed in the channel, and garter snakes forage on these species. Red-shouldered Hawks (*Buteo lineatus*) forage along this riparian habitat for many of the smaller vertebrates associated with this habitat. Small mammals that occur here include deer mice in the willow thicket, and in association with the wet emergent vegetation, California vole. Several medium-sized mammals (*e.g.*, striped skunk (*Mephitis mephitis*), raccoon, and gray fox) also find cover and forage here. Great Blue Herons, Black-crowned Night Herons in the coast live oak trees.

C. AQUATIC/FRESHWATER EMERGENT

1. Vegetation

Aquatic/freshwater emergent habitat occurs primarily within the P-line channel and within portions of Patterson Slough (Figure 2). The deep-water flow of the P-line supports vegetation primarily along the margins of the channel. Species observed include broad-leaved cattail and acute bulrush (*Scirpus acutus* var. *occidentalis*). Aquatic/freshwater emergent species observed within portions of Patterson Creek include broad-leaved cattail, acute bulrush, and mosquito ferm (*Azolla filiculoides*). Portions of the agricultural drainage ditches in the western central and southwest areas on site also support patches of aquatic/freshwater emergent vegetation.

2. Wildlife

Many of the species occurring in the emergent vegetation of the riparian areas also occur in this habitat. Common birds found in the freshwater emergent vegetation include the Song Sparrow, Red-winged Blackbird and the Marsh Wren. Cattails and bulrushes provide important cover for many wildlife species associated with fresh water marshes and open water. In addition, many waterfowl, such as the Pied-billed Grebe (*Podilymbus podiceps*), Cinnamon Teal (*Anas cyanoptera*), American Coot (*Fulica Americana*), Northern Shoveler (*Anas clypeata*), and Canada Geese (*Branta canadensis*) occur in the open water found in this habitat.

D. DEVELOPED

Developed area occupies approximately 4.5 acres of the site and includes the agricultural structures and the farm labor camp buildings in the southern and central portions of the site, respectively (Figure 2). Developed areas are devoid of vegetation.

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1. Wildlife

The wildlife most often associated with developed areas are those that are most tolerant of periodic human disturbances, including several introduced species such as European Starlings (*Sturnus vulgaris*), Rock Doves, house mice (*Mus musculus*), and Norway rats. Norway rats typically burrow under structures near water. Native species that are able to utilize these habitats include western fence lizards, American Robins (*Turdus migratorius*), Brewer's Blackbirds, Northern Mockingbirds (*Mimus polyglottos*), Mourning Doves, House Finches, California ground squirrels, black-tailed hares, and striped skunks. Barn Owls (*Tyto alba*) may roost and breed in the agricultural buildings, foraging over adjacent habitats. Likewise, some bats that forage throughout the study area, such as Mexican free-tailed bat, Yuma bat, pallid bat, and big brown bat (*Eptesicus fuscus*), may make use of small cavities associated with structure eves, although no specific bat roosts were observed on-site.

III. SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

Information concerning threatened, endangered or other special-status species that may occur in the area was collected from several sources and reviewed by H. T. Harvey & Associates' biologists. These sources included in-house sensitive species maps of the county, the CDFG's Natural Diversity Data Base (CNDDB; 2000), the *California Native Plant Society's* [CNPS] *Inventory of Rare and Endangered Vascular Plants of California* (2001), *The Jepson Manual* (Hickman 1993), *Manual of the Grasses of the United States* (Hitchcock 1971), and miscellaneous information available through the USFWS, CDFG, technical publications, and consultation with an East Bay Regional Parks District botanist (Brad Olson, pers. comm.).

A search of published accounts of special-status species in the vicinity was conducted using the California Natural Diversity Data Base Rarefind (2000). Included in the search were the United States Geological Survey (USGS) Quadrangle Maps for Newark, California in which the site occurs, as well as the eight surrounding quadrangles: Dublin, Hayward, Milpitas, Mountain View, Niles, Palo Alto, Redwood Point and San Leandro. All species listed as occurring in Alameda County and occurring on CNPS Lists 1A, 1B, 2, 3, or 4 were reviewed. An overview of special-status species regulations is provided in Appendix A.

A. SPECIAL-STATUS PLANT SPECIES

Field surveys were conducted during the summer and fall of 2000, and the spring and summer of 2001, for habitats capable of supporting special-status plants on site. The surveys involved hiking the entire study area to observe all habitats on site. Additional field surveys were conducted during on-going wetland field monitoring in the winter and spring of 2001, 2002, 2003 and 2004.

Many of the special-status plant species occurring in the vicinity of the property are found only in habitat types that are not present in the study area. Specifically the following habitat types that could support special status plants but are absent from the site include: broadleaved upland forests, chaparral, lower montane coniferous forest, alkali playa, coastal prairie, coastal bluff scrub, coastal dunes, serpentine soils, north coast coniferous forest, closed-cone coniferous forest, meadows, and coastal salt marsh. Thus, species that occur in the region, but which do not occur in habitats or microhabitats present on site were not included or discussed below. These species include San Mateo thorn-mint (Acanthomintha duttonii), robust spineflower (Chorizanthe robusta var. robusta), Palo Alto thistle (Cirsium praeteriens), Point Reyes bird'sbeak (Cordylanthus maritimus ssp. palustris), Diablo helianthella (Helianthella castanea), bigscale balsamroot (Balsamorhiza macrolepis var. macrolepis), fragrant fritillary (Fritillaria liliacea), Marin western flax (Hesperolinon congestum), Kellogg's horkelia (Horkelia cuneata ssp. sericea), slender-leaved pondweed (Potamogeton filiformis), and most beautiful jewelflower (Steptanthus albidus ssp. peramoenus). Descriptions follow for only those species for which potential habitat occurs, or regarding which the resource agencies have expressed particular concern.

NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Federal or State Endangered Species	ed Species		
Contra Costa goldfields (Lasthenia conjugens)	FE, CNPS IB	Cismontane woodland, vernal pools, mesic valley and foothill grassland.	Potential habitat exists on site. Species determined to be absent.
California seablite (Suaeda californica)	FE, CNPS 1B	Coastal salt marshes and swamps	Potential habitat exists on site. Species determined to be absent.
Vernal Pool Tadpole Shrimp (Lepidurus packardi)	跙	Vernal pools and swales containing clear to highly turbid water.	Marginal habitat occurs on the sites with appropriate soils. Recent records occur about 7 mi south of the site. Protocol-level field surveys conducted in 2003. Species determined to be absent.
California Red-legged Frog (Rana aurora dratonii)	FT, SP, CSSC	Streams, freshwater pools and ponds with overhanging vegetation	Potential habitat on site, no hydrological connection to known populations, but the site provides a large area with potential breeding habitat. Protocol-level surveys conducted in 2000 had negative results. Presumed absent.
Bald Eagle (Haliaeetus leucocephalus)	FE, SE, SP	Occurs mainly along sea coasts, rivers and lakes; nests in tall trees or in cliffs. Feeds mostly on fish.	Rare winter visitor.
American Peregrine Falcon (Falco peregrinus anatum)	FE,SE,SP	Forages in many habitats; requires cliffs for nesting.	Occasional forager on site; no suitable breeding habitat on site.
California Clapper Rail (Rallus longirostris obsoletus)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass.	Recorded in adjacent salt marsh habitats, but no habitat on site. No recent records on site, and not expected to breed here. Presumed absent.
California Least Tern (Sterna antillarum brownii)	FE, SE	Nests along the coast on bare or sparsely vegetated, flat substrates.	Breeds along the Bay Shore at Alameda. Post-breeding foragers occur elsewhere along the bay and the salt ponds not likely on the site.
Willow Flycatcher (Empidonax traillii)	FE (extimus) SE (brewsteri)	Breeds locally in riparian habitats in mountains and southern deserts.	Uncommon migrant; those occurring on site are probably not of the listed races.
Salt Marsh Harvest Mouse (Reithrodontomys raviventris)	FE, SE	Pickleweed in saline emergent wetlands.	Records for this species occur in the area (one record about 6.5 miles to the south), but habitat for this species does not occur on the site. Salt marsh habitat, with dense stands of pickleweed, occurs in areas immediately south of the site, but this habitat is isolated from the site by a road and levee. Presumed absent.
Federal or State Threatened Species	d Species		
Western Snowy Plover (Charadrius alexandrinus nivosus)	FT, CSSC	Sandy beaches on marine and estuarine shores.	No suitable breeding or foraging habitat on site; May occur rarely in adjacent areas but not expected to breed there. Presumed absent.
Federal or State Proposed Endangered or Threatened Species	Endangered on	r Threatened Species	
California Tiger Salamander (Ambystoma californiense)	PC, CSSC	Vernal or temporary pools in annual grasslands, or open stages of woodlands.	Marginal but potential breeding habitat occurs on the site and a recent (1995) record for this species occurs about 6.5 mi. south of the site. Enhanced-level of field surveys conducted in 2002-03. Species determined to be absent
California Species of Special Concern	I Concern		
Western Pond Turtle (Clemmys marmorata)	ST	Permanent or nearly permanent water in a variety of habitats.	Potential foraging, basking, and breeding habitat on the site. Not observed during surveys.
American White Pelican (Pelecanus erythrorhynchos)	CSSC	Forages on fish found in freshwater lakes and rivers and breeds up to 150 miles from feeding	Observed foraging immediately adjacent to the site, and expected to forage on the site. No breeding habitat on or near the site.

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Table 1. Special-status Plant and Animal Species, Their Status, and Potential Occurrence on the Patterson Ranch Site,

Fremont, California.			
NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Double-crested Cormorant Phalachorcorax auritus)	CSSC	Colonial nester on coastal cliffs, offshore islands, electrical transmission towers, and along interior lake margins. Feeds on fish.	Observed flying over the site but no breeding habitat on the site, and only marginal foraging habitat on the site.
White-faced Ibis (Plegadis chihi)	cssc	Forages in freshwater marshes, and to a lesser extent, brackish areas.	Occasional visitor to region in fall and winter. Potential foraging habitat on the site.
Long-billed Curlew (Numenius americanus)	CSSC	Nests in both dry and wet uplands; occurs on beaches along coast and inland lakes, salt marshes and grain fields.	No breeding habitat but expected to forage on the site.
Califomia Gull (Larus californicus)	CSSC	Common during fall, winter, and spring; occasionally during summer.	May occur on-site throughout the year. Not expected to breed on the site.
Cooper's Hawk (Accipiter cooperii)	CSSC	Uses many habitats in winter and migration.	Observed foraging on the site and potential breeding habitat occurs in dense woodland on the site.
Merlin (Falco columbarius)	CSSC	Uses many habitats in winter and migration.	Occasional forager during migration and winter.
Prairie Falcon (Falco mexicanus)	CSSC	Forages on birds and small mammals in dry, open grasslands.	May occur on site primarily as a winter visitor; but also rarely in summer.
Northern Harrier (Circus cyaneus)	CSSC	Forages in open to herbaceous stages of many habitats.	Forages on site and potential breeding habitat on site.
Golden Eagle (Aquila chrysaetos)	CSSC	Breeds on cliffs or in large trees or structures.	May rarely fly over the site; no breeding habitat on site.
Burrowing Owl (Atheve cunicularia)	CSSC	Flat open grasslands.	No owls observed on the site but potential breeding habitat occurs on the site. Historically owls have been present on the site. Enhanced-level surveys conducted in 2000 and 2001. Presumed absent.
Short-eared Owl (Asio flammeus)	CSSC	Requires tall emergent vegetation or grasses for mating.	May occur during migration and winter.
Loggerhead Shrike (Lanius ludovicianus)	CSSC	Breeds in brushy, open areas.	Forages and possibly breeds on the site.
Saltmarsh Common Yellowthroat (Geothlypis trichas sinuosa)	CSSC	Fresh and salt water marshes; thick foraging cover; breeds in tall grass, tules, and willows.	Potential breeding habitat on the site. Observed on site.
Alameda Song Sparrow (Melospiza melodia pusillula)	cssc	Breeds primarily in tidal wetlands.	Song Sparrows observed on the site and breeding habitat on-site. However, this race is primarily restricted to tidal habitats. Observed on site.
Tricolored Blackbird (Agelaius tricolor)	CSSC	Breeds near fresh water in dense emergent vegetation.	Potential breeding habitat on the site. Observed on site. Breeds in Coyote Hills wetlands.
Salt Marsh Wandering Shrew (Sorex vagrans halicoetes)	cssc	Medium high marsh 6-8 feet above sea level with abundant driftwood and pickleweed.	No records for the area and considered rare. Marginal habitat on site, assumed absent.
Townsend's Big-eared Bat (Corynorhinus townsendii)	cssc	Roosts in caves and mine tunnels in a variety of habitats.	No records for the area and no maternity roosting habitat on site. Presumed absent.
California Mastiff Bat (Eumops perotis californicus)	cssc	Forages over many habitats; requires tall cliffs or buildings for roosting sites.	No records for the area and no roosting habitat on site. Presumed absent.
Pallid Bat (Antrozous pallidus)	CSSC	Forages over many habitats; roosts in buildings, rocky outcrops and rocky crevices in mines and caves.	Potential forager on site, but surveys did not detect any roost sites.

NAME	*STATUS HABITAT	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
State Protected Species or CNPS Species	CNPS Species		
Alkali milk-vetch	CNPS IB	Alkaline soils in playas, vernal pools, and adobe	Alkaline soils in playas, vernal pools, and adobe Potential habitat exists on site. Species determined to be absent.
(Astragalus tener var. tener)		clay areas in valley and foothill grassland.	
Congdon's tarplant	CNPS 1B	Alkaline soils; valley and foothill grassland,	Potential habitat exists on site. Species determined to be absent
(Centromadia parryi ssp. congdonii)		chenopod scrub, alkali meadows and flats.	
Western leatherwood	CNPS IB	On moist slopes in partial shade in broadleaved	Marginal habitat on site. Species determined to be absent
(Dirca occidentalis)		upland forest, closed-cone coniferous forest, chanarral cismontane woodland northcoast	
		forest, riparian forest and riparian woodland	
Hairless popcorn-flower	CNPS 1A	Alkaline soils; meadows, marshes and swamps	Potential habitat exists on site. Species determined to be absent
(Plagiobothrys glaber)			
White-tailed Kite	SP	Forages in open areas of many habitats.	Resident, breeds on the site.
(Elanus caeruleus)			-
Ringtail	SP	Found in a variety of woodland types, often near	Found in a variety of woodland types, often near Marginal habitat on the site. Not known to be present along lower Alameda
(Bassariscus astutus)		water	Creek: nresumed absent

*SPECIAL STATUS SPECIES CODE DESIGNATIONS

Endangered	Thrantond
Federally listed	Eadarolly, listad
FE =	ETT -

- Federally listed Threatened
- State listed Threatened ST =
- Federally proposed Endangered FPE =
- Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened FC=
 - California Species of Special Concern CSSC =
 - State Protected Species SP =
- Plants presumed extinct in California CNPS 1A =

Plants rare, threatened, or endangered in California and elsewhere CNPS IB =

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1. Federal or State Endangered or Threatened Species

Contra Costa Goldfields (Lasthenia conjugens). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B. This annual herb occurs in mesic areas in cismontane woodlands, alkaline playas, valley and foothill grasslands, and vernal pools. The blooming period is from March to June. This range of this species is reported to have been reduced to Alameda, Contra Costa, Monterey, Napa and Solano counties, having been extirpated from three other counties forming its historic range, including Santa Clara County (CNPS 2001). However, the CDFG Rarefind Database reports two large populations within the Milpitas quadrangle, one about 0.4 miles west of I-880, near Sky Sailing airport, and the second in the San Francisco National Wildlife Refuge, both in Alameda County near the site. Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the goldfields. Plants were not observed during on-going field studies and this species is considered absent.

California Seablite (Suaeda californica). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B. This evergreen shrub occurs in coastal salt marshes and swamps. The blooming period extends from July to October. The California Natural Diversity Database has two records within the quadrangle search area, a historical occurrence on Bay Farm Island, Alameda County, which is now believed extirpated, and an occurrence in the salt flats at the Palo Alto Yacht Harbor, the status of which is unknown. The seasonal wetland and aquatic/freshwater emergent areas of the site at one time may have provided suitable habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the California seablite. Plants were not observed during ongoing field studies and this species is considered absent.

2. CNPS Listed Species

Alkali Milk-vetch (Astragalus tener var. tener). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. This annual herb occurs in alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grasslands. The blooming period extends from March to June. The range of this species currently includes Alameda, Merced, Solano, and Yolo counties, and has been extirpated from ten others including Contra Costa County. However, the CDFG Rarefind Database has a single recent occurrence within the quadrangle search area in the Milpitas quadrangle, in Alameda County, in the Pacific Commons Preserve (CNDDB 2000). Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the alkali milk vetch. Plants were not observed during ongoing field studies and this species is considered absent.

Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. Congdon's tarplant occurs in valley and foothill grassland, on alkaline soils. The flowering period for this species occurs from June through November. This species has been nearly extirpated from the Bay Area; extant populations are known from Monterey and San Luis Obispo Counties, and possibly Santa Clara County (CNPS 2001). The CDFG Rarefind Database has several records from as recently as 1998 within the quadrangle search area. The records are: three in the Milpitas quadrangle, one west of the Nimitz Freeway near Cushing Parkway, another in Sunnyvale Baylands Park, and a final occurrence in Alviso; two in the Dublin quadrangle, one in the Camp Parks Reserve Forces Training Area and the other in San Ramon Valley; one in the Niles quadrangle near the junction of Fremont Boulevard and Auto Mall Parkway; and finally an occurrence in the Mountain View quadrangle, near the mouth of Stevens Creek. The agricultural areas including the ruderal margins of these areas on site may provide suitable habitat, and the soils of the site are all alkaline. Plants were not observed during on-going field studies and this species is considered absent.

Western Leatherwood (*Dirca occidentalis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. Western leatherwood is found on moist slopes in partial shade in a variety of habitats. These habitats include broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland. This deciduous shrub flowers from January through April. Western leatherwood is known from Alameda, Contra Costa, Marin, Santa Clara, San Mateo, and Sonoma counties (CNPS 2001). The CDFG Rarefind Database reports only three occurrences of western leatherwood within the quadrangle search area; these are located in Mountain View and Palo Alto. Although the riparian area may provide marginal habitat for this species, the small, fragmented, and somewhat open canopy nature of the habitat makes it unlikely that this species will occur. This species is considered absent.

Hairless Popcorn-flower (*Plagiobothrys glaber*). Federal Listing Status: None; State Listing Status: None; CNPS List 1A. This annual forb occurs in wet, alkaline soils of meadows and coastal salt marshes and swamps. The blooming period ranges from March to May. Most occurrences have been reported from the southern shore of San Francisco Bay and alkaline flats in the southern Santa Clara Valley, but it has also been reported to occur in the Altamont quad (CNDDB 2000). Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the hairless popcorn flower. <u>Plants were not observed during on-going field studies and this species is considered absent</u>.

B. SPECIAL-STATUS ANIMAL SPECIES

Wildlife surveys were conducted at the site during the mid- to late summer of 2000 and during spring and summer of 2001. Surveys for <u>Burrowing Owls</u>, other raptors, and other wildlife were conducted on July 19, 21, 26, and August 9, 2000. Other special-status wildlife surveys were conducted on August 2, 25, 31, and September 7, 2000. Surveys for amphibians and reptiles, including the <u>red-legged frog</u> were done on August 2, 12, 13, 14, 15, 18, 21, 27, 28, 31, and September 1, 4, 7, and 14, 2000. They concentrated on the areas of watercourses, including Patterson Slough, the Alameda Creek flood control channel, the "P" line and the "K"-line (both flood control channels. The special-status animal species that occur in the vicinity of the site in habitats similar to those found on the site are described below.

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Surveys for <u>Burrowing Owls</u> and other nesting raptors (potentially including Red-tailed Hawks, White-tailed Kites, and other locally-occurring species) were conducted on 7, 12, 14, 15, and 19 June; 10 July; and 13 and 15 August 2001, in addition to work completed in 2000. Surveys were conducted by walking transects and visually inspecting the entire site for potential nesting habitat. When potential habitat was encountered, area searches were conducted for nesting birds, nest structures, or secondary evidence indicating the presence of these species.

Additionally, this report includes an overview of the results of surveys conducted by our firm for the <u>California tiger salamander</u> in the winter of 2003-03 (Appendix B). Condor Country Consulting (2003; Appendix C) conducted wet season surveys for special-status branchiopods in the winter and spring of 2002-03. Soils taken during those surveys were analyzed for branchiopod cysts by Helm Biological Consulting (2004; Appendix D).

1. Federal or State Endangered or Threatened Species

Vernal Pool Tadpole Shrimp (Lepidurus packardi). Federal Listing Status: Endangered; State Listing Status: None. Vernal pool tadpole shrimp occur primarily in the Central Valley and range from east of Redding in Shasta County south to the San Luis National Wildlife Refuge in Merced County (59 FR 48136). Outside of the Central Valley, a single population of the vernal pool tadpole shrimp occurs about 6.5 miles to the south of the site in the Warm Springs Seasonal Wetland in Fremont, Alameda County (Caires et al. 1993). They have also been found on the Catellus site. Tadpole shrimp eat microscopic organisms, detritus, dead tadpoles, earthworms, frog eggs and mollusks. Females deposit eggs on vegetation on the pool bottom. Pools containing vernal pool tadpole shrimp have clear to highly turbid water and range in size from less than an acre to 90 acres. These pools may be highly turbid and mud-bottomed or grass-bottomed in old alluvial soils underlain by hardpan. Pools generally have low conductivity, low total dissolved solids and low alkalinity (Eng et al. 1990). Tadpole shrimps are demersal (i.e., they are generally benthic, but are capable of swimming), and they also burrow in soft sediments. The periodic flooding that allowed vernal pool species to disperse became rare as people built dams, drainage canals and other barriers. However, vernal pool tadpole shrimp eggs can pass through bird digestive tracts intact and may be dispersed by birds.

There are no records of tadpole shrimp on the site. Habitat on site is marginal, and there are no areas that have the typical hummock topography of vernal pools. However, there are areas on site that pond seasonally, and the underlying soil composition is consistent with those soils supporting vernal pool tadpole shrimp on the Warm Springs Seasonal Wetland to the south (Pat Boursier, pers. obs.). Based on habitat assessment, the species is very unlikely to occur, as the species requires 3-4 weeks of ponding to develop to maturity. However, it has been found in ditches and other unlikely locations at the Catellus site in Fremont. <u>Surveys for this species conducted during 2002-03 proved negative</u> (Condor Country Consulting 2003).

California Red-legged Frog (*Rana aurora draytonii*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern. The USFWS listed the California red-legged frog as federally threatened on May 23, 1996. The red-legged frog is a medium-sized frog with reddish legs. This species is generally restricted to riparian habitats in California and northern Baja California. Red-legged frogs prefer deep, quiet pools (greater than 3 feet deep) in creeks,

rivers, or lakes below 1,000 meters in elevation (about 3,000 feet). Habitat requirements include fresh emergent or dense riparian vegetation, especially willows adjacent to shorelines. Red-legged frogs can survive in seasonal bodies of water that are dry for short periods if there is a permanent water body or dense vegetation stands nearby.

The adults are normally active at night and breed in ponds and creeks, or in marshes, during the late winter, or early spring, after waters recede. Females attach eggs in a single cluster to a vegetation brace just under the surface of the water. The eggs hatch in just over a week and the resulting larvae feed on plant and animal material on the bottom of the pond. It takes at least four months for the larvae to metamorphose into juvenile frogs.

On February 18, 1997 the USFWS released protocols for assessing presence or absence of the California red-legged frog on site. Appropriate site assessments include an analysis of all known sightings within a five-mile radius, and a description of the habitats both within the site and within one mile from the boundary of the site. The site assessment also includes a description of the upland and aquatic habitats of the site. Any subsequent surveys are generally conducted between May 1 and November 1. All aquatic habitats (*i.e.*, suitable habitat) would be surveyed on four separate occasions (two diurnal and two nocturnal surveys). Diurnal surveys should be conducted on clear, sunny days and nocturnal surveys should be conducted on warm, still nights between one hour after sunset and 12 midnight.

California red-legged frogs have been observed in a number of aquatic and terrestrial habitats throughout their historic range. The key to the presence of red-legged frogs in these habitats is the presence of perennial (or near perennial) water and the general lack of introduced aquatic predators. These predators include centrarchid fishes (e.g., largemouth bass [Micropterus salmoides], green sunfish [Lepomis cyanellus], and bluegill [L. macrochirus]), crayfish (Pacifastacus leniusculus and Procambarus clarkii), and bullfrogs (Rana catesbeiana).

The site is located near Alameda Creek, a watershed that supports California red-legged frogs. However, according to the CNDDB (2000) and other records, there are relatively few records, and no recent records, from low-lying bayside areas of Alameda County where this property is located.

On September 11, 2000, the USFWS (65 Federal Register § 54892) proposed critical habitat for the California red-legged frog. The closest designated critical habitat lies east of the site, along the Walpert Ridge in Unit 15, the East Bay-Diablo Range Unit. Although habitat on the property appears suitable for this species, no red-legged frogs were detected during protocol-level surveys in 2000. Furthermore, it is unlikely that a frog could be washed down from the upper watershed because of existing structure barriers between the known populations and the site. Therefore this species is presumed absent from the property.

California Clapper Rail (*Rallus longirostris obsoletus*). Federal Listing Status: Endangered; State Listing Status: Endangered. The California Clapper Rail is a locally common permanent resident of coastal salt and brackish marshes around San Francisco Bay and Monterey Bay. Most of the population exists at San Francisco Bay, but this subspecies may also still occur at Morro and Humboldt bays (Wilbur and Tomlinson 1976). Since the mid-1800s,

Patterson Ranch Biological Opportunities and Constraints Analysis

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H. T. Harvey & Associates 2 April 2004 

about 80% of San Francisco Bay's marshlands have been eliminated through filling, diking, or conversion to salt evaporation ponds. As a result, the California Clapper Rail lost most of its former habitat, the population declined severely, and the species was listed as endangered.

Clapper Rails along the Pacific Coast prefer salt marshes and brackish marshes dominated by cordgrass (*Spartina foliosa*) and marsh gumplant (*Grindelia stricta*); in brackish marshes they also frequent areas supporting bulrushes. These birds also require shallow areas or mudflats for foraging, particularly channels with overhanging banks and vegetation. As a refuge from extreme high tides and as a supplementary foraging area, rails move to the upper marsh vegetation where it intergrades with peripheral upland vegetation. These birds have no requirement for fresh water.

Marsh habitats on the site do not provide suitable breeding habitat for this species, and the aquatic emergent vegetation is likely too far from areas with appropriate habitat for this species to occur on the site as an occasional visitor. Therefore, there is no on-site habitat and the California Clapper Rail is presumed absent from the site.

Salt Marsh Harvest Mouse (Reithrodontomys raviventris). Federal Listing Status: Endangered; State Listing Status: Endangered, Protected. The salt marsh harvest mouse is found only in saline wetlands of San Francisco Bay and its tributaries. The southern subspecies *R. raviventris* is restricted to an area from San Mateo County and Alameda County along both sides of San Francisco Bay south to Santa Clara County. The salt marsh harvest mouse occurs with the closely related, ubiquitous and abundant western harvest mouse (*R. megalotis*) at upper edges of marshes and in marginal areas. Both animals occur in pickleweed, but the salt marsh harvest mouse replaces the western harvest mouse in denser areas of pickleweed. *R. raviventris* has declined substantially in recent decades. This decline is due primarily to diking and filling of marshes, subsidence, and changes in salinity brought about by increasing volumes of fresh water discharge into the bay.

Densely vegetated, tidal, saline marsh dominated by pickleweed is generally considered prime habitat for this species. Moderate populations of salt marsh harvest mouse have also been found in diked marshes. Salt marsh harvest mice may also be found in grassland habitats adjacent to pickleweed marshes, particularly during the spring. These grasslands are generally used by harvest mice only in the spring when new grass growth affords suitable cover and possibly forage. Salt marsh harvest mice may also use adjacent grasslands on a daily basis to avoid high tide events.

<u>Appropriate habitat for this species does not occur on the site</u>. However, pickleweed does occur in dense stands south of the levee road adjacent to the extreme southwest corner of the property. Because no cover occurs on this road, and the grassland is probably over 25 feet from the pickleweed habitat, the salt marsh harvest mouse is not expected to occur in this adjacent grassland, or any other areas of the site.

2. Federal or State Candidate Species

California Tiger Salamander (Ambystoma californiense). Federal Listing Status: Candidate; State Listing Status: Species of Special Concern. On April 18, 1994, the USFWS determined that the proposal to list the tiger salamander as endangered was warranted but precluded due to the pending listing action of higher priority species (Federal Register 59:74). The USFWS is supposed to review this decision annually until such time as the agency determines that the listing is either unwarranted or warranted. The status of the tiger salamander presently remains unchanged.

This species' preferred habitat is temporary (minimum of 3 to 4 months) or permanent water sources (*i.e.*, vernal pool, ephemeral pool, or human-made ponds) surrounded by upland habitats that support small mammal burrows. The ponds provide the breeding and juvenile habitat, while small mammal burrows (*e.g.*, ground squirrel or pocket gopher) in the upland habitats support adult salamanders during the dry season.

Adults often emerge from the burrows at night during the first moderate to heavy winter rains and migrate to vernal pools, seasonal ponds, or human-made ponds, where they lay their eggs. The eggs are attached singly or in clumps to vegetation under or directly on the bottom of the pool if emergent vegetation is lacking. The eggs hatch approximately one week after they are deposited. The larvae prey upon invertebrates and other amphibian larvae for three to six months, during which time they metamorphose into juveniles. Juveniles typically leave the pools in large numbers during a one- to two-week period, usually as the ponds dry. The juveniles then search for available burrows. Juveniles aestivate in these burrows until the following winter.

Tiger salamanders take several years to reach maturity and do not necessarily breed every year, even if sufficient habitat is present. Their range is restricted to the Central Valley and Coast Range of California from Butte County south to Santa Barbara County. They have disappeared from a significant portion of their range due to habitat loss from agriculture and urbanization and the introduction of non-native aquatic predators (e.g. bluegill [Lepomis macrochirus], largemouth bass [Micropterus salmoides], mosquitofish [Gambusia affinis], and bullfrogs [Rana catesbeiana]).

This species occurs approximately 6.5 miles to the south in the Warm Springs Seasonal Wetlands area. Surveys have not been conducted for this species, but the habitat is very marginal. There appear to be no areas on-site that would pond seasonally for the required 3-4 months to complete a breeding cycle. The aquatic habitat associated with Patterson Slough is very unlikely to support breeding CTS, in part because the area supports bullfrogs and probably fish, both of which feed on CTS juveniles. There are several depressions off-site, within the East Bay Regional Park land, that may pond, but probably not for the required length of time to support breeding. Surveys conducted in the winter and spring of 2002-03 proved negative. This species is presumed to be absent from the site.

C. OTHER SPECIES

The following suite of species really does not seriously constrain site development. Either they do not occur, occur in areas that would not be affected by development, or potential impacts are minimal. Most are protected from disturbance during the breeding season, so there may be either the need to conduct preconstruction surveys or phase construction into the non-breeding season.

Northern Harrier (Circus cyaneus). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Northern Harrier is commonly found in open grasslands, agricultural areas and marshes. Nests are built on the ground in areas where long grasses provide cover and protection. Harriers hunt for a variety of prey, including rodents, birds, frogs, reptiles, and insects by flying low and slow in a traversing manner using both sight and sound to detect prey items. Harriers were observed on the site during surveys and potential breeding habitat occurs in the tall herbaceous vegetation alongside Patterson Creek on the site. Future development resulting in impacts to foraging habitat of this species is unlikely to have significant impacts on Northern Harrier populations due to the availability of foraging habitat elsewhere in the region. However, development in marshes, ruderal habitats, grasslands, or other habitats having tall, dense herbaceous vegetation should be preceded by preconstruction surveys for nesting harriers if development is to occur during the breeding season (February through August).

White-tailed Kite (*Elanus caeruleus*). Federal Listing Status: None; State Listing Status: Protected. This species prefers habitats with low ground cover and variable tree growth. Kite nests are built near the tops of oaks, willows, or other dense broad-leafed deciduous trees in partially cleared or cultivated fields, grassy foothills, marsh, riparian, woodland, and savanna. Kites prey primarily on small rodents (especially the California vole), but also feed on birds, insects, reptiles, and amphibians. When prey is abundant these birds may rear two broods in a single breeding season. Once considered endangered, the kite is now fairly common, though fully protected in the State of California.

A pair of White-tailed Kites nested on the site during the 2000 breeding season (Figure 3). Two adult and 3 to 4 juvenile White-tailed Kites were noted proximate to the fields at the high end of Patterson Creek on 7 June 2001. White-tailed Kite adults and the presence of newly fledged juveniles at the site were indicative that they were breeding on the property. An adult and juvenile were observed again on 19 June 2001, a possible nest was detected in a sycamore tree in the area of the "V" formed by the east side of Patterson Creek. To ensure that no White-tailed Kite nests are disturbed during construction activities, preconstruction surveys should be conducted if development is to occur during the breeding season (February through August).

Cooper's Hawk (Accipiter cooperii). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Cooper's Hawk is a medium-sized hawk that preys on a variety of bird species and occasionally takes small mammals and reptiles. Breeding pairs in California usually select nest sites within dense stands of live oak woodland, riparian habitats, or other wooded areas. However, pairs may also nest in sparsely wooded areas and, especially in recent decades, nesting pairs have been found breeding in suburban areas and parks in the San



Saltmarsh Common Yellowthroat (*Geothlypis trichas sinuosa*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Saltmarsh Common Yellowthroat inhabits emergent vegetation and breeds in fresh and brackish marshes and associated upland areas in the San Francisco Bay Area. This subspecies (one of the approximately 12 subspecies of Common Yellowthroat recognized in North America) breeds from mid-March through early August and pairs frequently raise two clutches per year. Because these subspecies cannot be reliably distinguished in the field, determination of the presence of Saltmarsh Common Yellowthroat can be achieved only by locating a nest in the breeding range known for this subspecies, or by observing them during the summer months when only the Saltmarsh Common Yellowthroat is present. Although little is known regarding the movements of this taxon, the wintering areas have been described as coastal salt marshes from the San Francisco Bay region to San Diego County (Grinnell and Miller 1944).

Yellowthroats were not observed on the site in 2000. They were detected in all surveyed wetland and riparian habitats throughout the site (Figure 3) during the 2001 surveys. At all sites there was also evidence of breeding activity. Males were observed singing, carrying food, and defending territories on 12 and 19 June, and juvenile birds were observed on 19 June 2001. They occurred in relatively high densities. Ten individuals were detected in approximately 2000 linear feet of channel. Forty-three individuals were counted in the wetland and riparian areas.

Alameda Song Sparrow (*Melospiza melodia pusillula*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Alameda Song Sparrow is one of three subspecies of Song Sparrow breeding only in salt marsh habitats in the San Francisco Bay area. Locally it is most abundant in the taller vegetation found along tidal sloughs, including salt marsh cordgrass and marsh gumplant. Although it is occasionally found in bulrushes in brackish marshes, the Alameda Song Sparrow is very sedentary and is not known to disperse upstream into freshwater habitats. Populations of the Alameda Song Sparrow have declined due to the loss of salt marshes around the bay, although within suitable habitat it is still fairly common.

The location of the interface between populations of the Alameda Song Sparrow and those of the race breeding in freshwater riparian habitats (*M. m. gouldii*) along Alameda Creek is not known due to difficulties in distinguishing individuals of these two races in the field.

The presence of the Alameda Song Sparrow on the site is not known due to difficulties in distinguishing among subspecies in the field. The Alameda Song Sparrow is most abundant in the taller vegetation found along tidal sloughs, including salt marsh cordgrass (*Spartina foliosa*) and marsh gumplant (*Grindelia stricta*). Although it is occasionally found in bulrushes in brackish marshes, the Alameda Song Sparrow is very sedentary and is not known to disperse upstream into freshwater habitats. It is possible that individuals of this race could occur in bulrush stands adjacent to the Alameda Creek flood control channel. On 19 June 2001 biologists counted 10 Song Sparrows in the wetlands in the northwest portion of the site, south of Patterson Creek (Figure 3).

Tricolored Blackbird (Agelaius tricolor). Federal Listing Status: None; State Listing Status: Species of Special Concern. Tricolored Blackbirds are found almost exclusively in the



Central Valley and central and southern coastal areas of California. The Tricolored Blackbird is highly colonial in its nesting habits and forms dense breeding colonies of up to tens of thousands of pairs. This species typically nests in tall, dense, stands of cattails or tules, but also nests in blackberry, wild rose bushes and tall herbs. Nesting colonies are typically located near standing or flowing freshwater. Tricolored Blackbirds form large, often multi-species, flocks during the nonreproductive period and range more widely than during the reproductive season.

Tricolored blackbirds could forage in most of the open habitats on the site during the nonbreeding season. In addition, records occur for this species on the site and in the adjacent Coyote Hills Regional Park (Environmental Science Associates 1991).

No Tricolored Blackbirds were observed during reconnaissance-level surveys in July and August 2000. On 12 June 2001 four male Tricolored Blackbirds and an unknown number of females and/or juveniles were observed in a mixed species flock foraging on site (Females and hatch-year blackbirds are not readily distinguishable by field observation; Figure 3). The flock roosted in the wetland vegetation alongside the "P-line" channel. A Tricolored Blackbird was also observed near an agricultural pond in a mixed species flock. Appropriate foraging habitat exists throughout the site, nesting habitat occurs in dense shrubs and emergent vegetation within wetland and riparian habitats on the site. Moderate numbers are known to winter in mixed flocks of blackbirds on the site (T. Ryan pers. obs.).

Pallid Bat (Antrozous pallidus pacificus). Federal Listing Status: None; State Listing Status: Species of Special Concern. Pallid bats are pale to light brown in color, and the Pacific race is one of the state's largest bats. Coastal colonies commonly roost in deep crevices in rocky outcroppings, in buildings, under bridges, and in hollow trees. Colonies can range from a few individuals to over a hundred. Some female/young colonies use their day roost for their nursery as well as hibernacula while other colonies migrate locally on a seasonal basis. Although crevices are important for day roosts, night roosts often include open buildings, porches, garages, nighway bridges, and mines. Pallid bats may travel up to several miles for water or foraging sites if roosting sites are limited. Pallid bats prefer foraging on terrestrial arthropods in dry open grasslands near water and rocky outcroppings or old structures. Myotis bats were observed foraging over agricultural lands suggesting bat roosts do occur on the site. Pallid bats were not detected during surveys. No impacts to nursery colonies would be expected.

Cliff Swallows and White-throated Swifts. Several localities are notable not for harboring special-status species, but for supporting colonies of non-status (but protected) species. Nesting Cliff Swallows were noted at three locations adjacent to the site. A nesting colony of approximately 175 Cliff Swallows was noted at the railroad bridge (Figure 3). That bridge is unlikely to be affected by any potential development scenario on the site. Another Cliff Swallow nesting colony of approximately 30 pairs were noted at the bridge over the slough channel. That arm-road bridge is likely to be removed if the site is developed. The third was inside a box sulvert and consisted of approximately 20 pairs. These Cliff Swallows were seen in large numbers foraging over much of the site. At least 4 pairs of White-throated Swifts were noted bridge in the drainage holes of the railroad bridge, and using the northernmost parcels of the property as foraging areas.

If the farm-road bridge is removed, that work should be completed in the non-breeding season. Any restoration or enhancements on site could incorporate swallow foraging habitat and nesting structures or surfaces.

IV. RECOMMENDATIONS

The largest concentration of sensitive biological resources, including wetland and riparian habitats, and potential habitat for special-status plants and wildlife, occurs on the southern one-half of the Patterson Ranch study area (Figure 3). These areas include Patterson Slough and the associated riparian, aquatic and emergent habitats. Protection of areas within this portion of the site, and appropriate buffers would avoid most of the potentially significant affects of development. Moreover, the potential for enhancement and restoration of wetland habitat is very high in these locations, and their proximity to open space would further enhance their values. Expansion of the D.U.S.T. Marsh and other wetlands of adjoining East Bay Parks land have the highest potential to increase habitat value. A combination of permanent and seasonal wetlands could produce a highly valuable, diverse, wetland complex.

Buffers would also assist with protecting and enhancing habitat values. A buffer of approximately 100 feet along the opposing banks of Patterson Slough including portions of the agricultural fields with wetland characteristics dominated by cattails south of the Slough should be incorporated in the planning concept wherever possible.

The next most biologically sensitive portions of the site, and therefore those with greatest implications to site planning, include those directly adjacent to Alameda Creek and the K-Line (Crandall Creek). Buffers along these areas would help to preserve the existing habitat values, but these areas are less sensitive biologically than the areas mentioned above.

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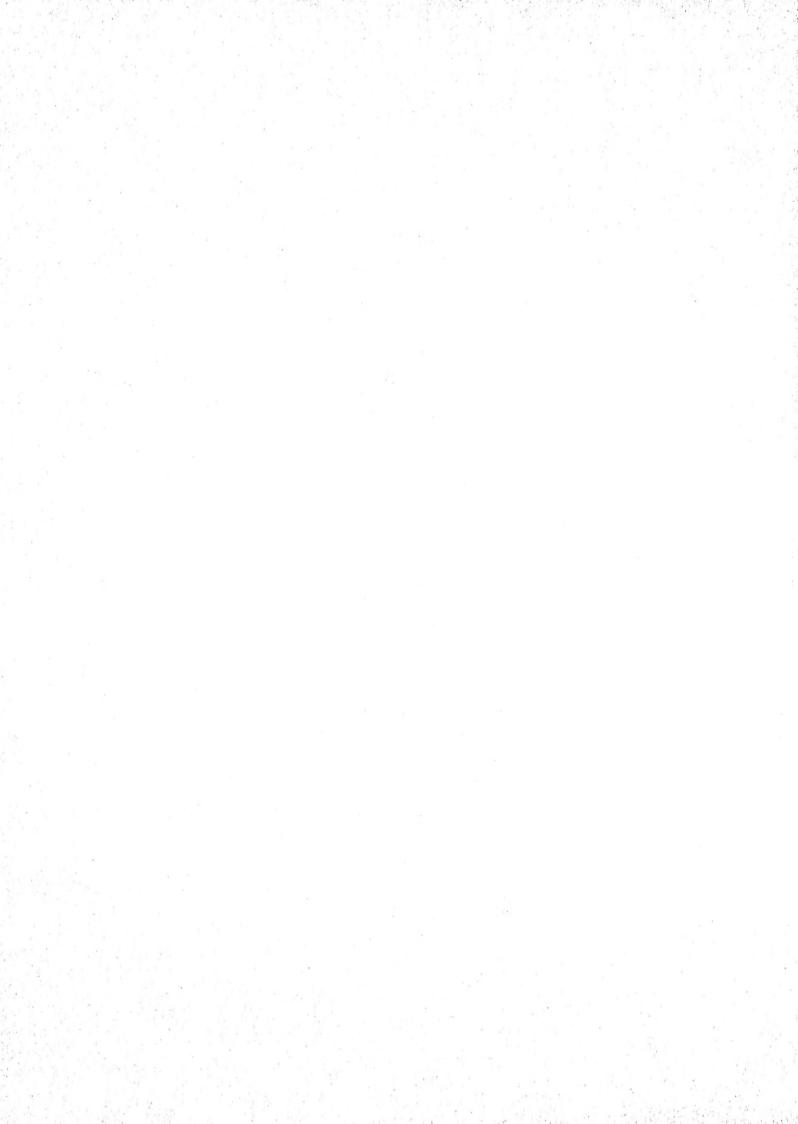
A. PERSONS CONTACTED

Brad Olson. East Bay Regional Park District. Phone number 510-544-2622.

Patterson Ranch Biological Opportunities and Constraints Analysis

APPENDIX B.

CALIFORNIA TIGER SALAMANDER 2002/2003 REPORT



ARDENWOOD FOREST CALIFORNIA TIGER SALAMANDER 2002/2003 REPORT

Prepared by

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Prepared for:

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Project 657-08

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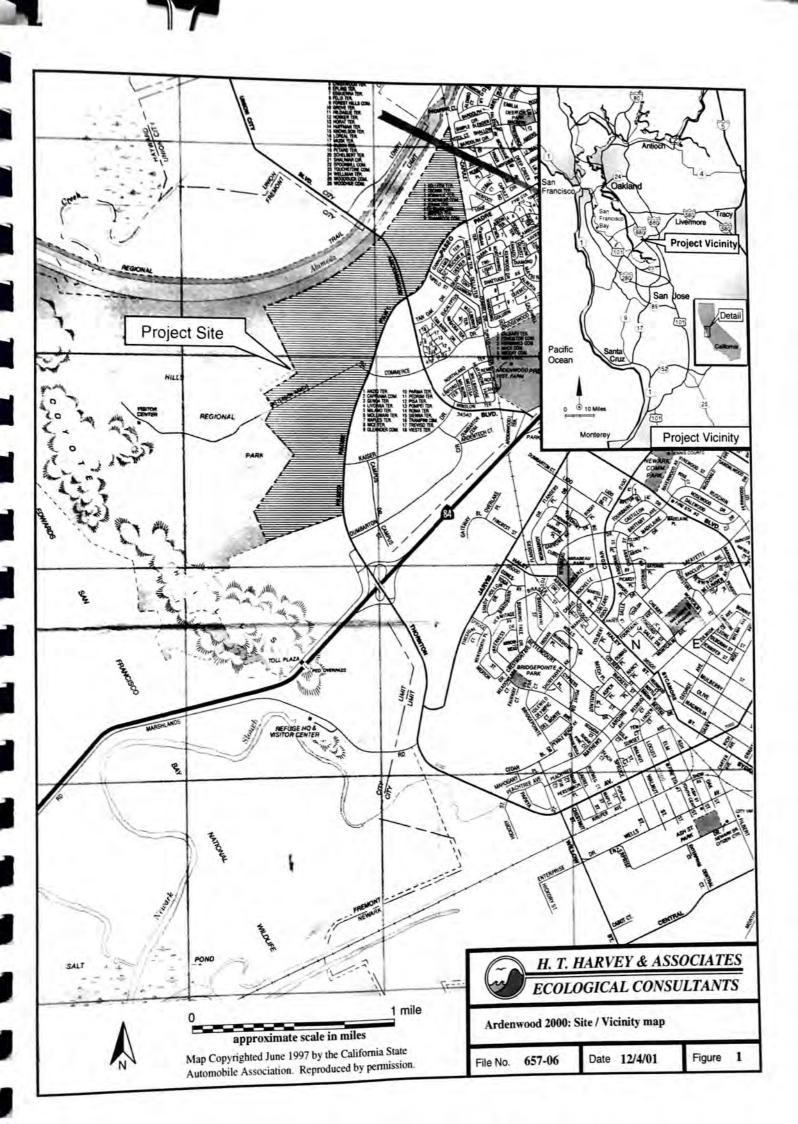
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INTRODUCTION

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This report describes protocol-level surveys for the California tiger salamander (*Ambystoma californiense*; State designated as a species of special concern). Surveys were conducted on the Ardenwood Forest proposed development site (Figure 1) during the 2002-2003 winter and spring breeding season to determine the salamander's presence or absence.



METHODS

Five nocturnal California tiger salamander (CTS, Ambystoma californiense) surveys were conducted by H. T. Harvey & Associate staff biologists on 12 December 2002, 16 December 2002, 12 February 2003, 15 February 2003, and 31 March 2003. The 12 and 16 December 2002 and 14 March 2003 surveys were conducted according to the recommendations issued by the California Department of Fish and Game (1997). However, due to insufficient rainfall, the surveys conducted 12 and 15 February did not meet protocol standards. On 12 February, significant rainfall occurred during the day, but rainfall had ceased by the time the survey was initiated. On 15 February, the rainfall, though moderate to heavy during the survey, did not begin until about the time the survey was initiated.

In all cases, surveys consisted of searching the following areas: 1) the berm along the stream at the northern boundary of the site, 2) the canal that intersects Paseo Padre Parkway in the southern half of the site, 3) the small pond near Paseo Padre Parkway just south of the canal, and 4) the elevated roadbed and surrounding area along the southern boundary of the site. All potential aestivation habitats for salamanders (under debris, in cracks, and the entrances of ground squirrel and gopher burrows) were examined. Handheld flashlights and headlamps were used during the surveys.

In addition, two daytime aquatic surveys for larval salamanders were conducted in the small pond near Paseo Padre Parkway on 14 March 2003 and 28 April 2003. These surveys, which consisted of dip-netting the water at the edge of the pond, met California Department of Fish and Game (1997) protocol standards. The southwestern corner of the project site, which pools water during wet periods, was dry on 14 March and 28 April and was not sampled.

RESULTS

No CTS was observed during any of the five nocturnal surveys, and none was observed in either of the two larval surveys. On the 31 March larval survey, the pond in which larval surveys were conducted held only 2 to 4 inches of water, covering about half the bottom of the pond. On the 28 April larval survey, the pond had been reduced to two small puddles, each no more than 20 feet in diameter and less than 1 inch deep.

DISCUSSION

Consistent with the results of the 2001-2002 survey season, CTS were not detected in the surveys conducted in 2002-2003. There are no reported records for CTS at the site. The closest record for the species listed in the CNDDB (2003) is approximately seven miles straight-line distance from the site (CNDDB occurrence no. 391).

The pond near the southeastern corner of the site provides poor breeding habitat and, even in the wettest years, may not retain water for a sufficient duration to allow CTS breeding and metamorphosis to occur. Most of the land within the survey area has been disked recently, which would have destroyed many of the burrows of California ground squirrels and other small mammals that otherwise might be present and possibly utilized by California tiger salamanders as estivation habitat. The lack of any CTS observation over a two-year survey period and the poor overall habitat quality present at the site provide strong evidence that the species does not estivate, breed, or otherwise occur at the Ardenwood site.

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Ninety-Day Findings Report USFWS Permit # TE-016591-2

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2002-2003 Wet Season Branchiopod Survey Report

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Patterson Ranch Fremont, Alameda County, California

November 5, 2003

Prepared for: The Frisbie Planning Company 109 Baldwin Avenue San Mateo, CA 94401

Prepared by: Wendy Weber, Principal

Condor Country Consulting P.O. Box 95 Port Costa, CA 94569

INTRODUCTION

This report presents the methods and results of the wet season surveys for listed branchiopods conducted during the 2002/2003-field season for the Patterson Ranch Site (previously known as Ardenwood) (Figure 1). The Frisbie Planning Company, on behalf of their client, requested that these surveys be performed to provide background information for potential residential development of a portion of the site. This information may then be used in the preparation of an Environmental Impact Report, should a project be proposed within the timeframe of this survey's viability.

Because the site may be developed, surveys were requested to determine the presence or absence of listed branchiopods in order to provide information on the feasibility of developing the site and potentially to comply with environmental regulations in the event that a project is proposed. A second survey is required to complete the requirements of the U. S. Fish and Wildlife Service (USFWS) "Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods" (Guidelines) (USFWS 1996). The second survey will be conducted during the 2003 dry season.

The site is approximately 429 acres of relatively flat, annually cultivated, agricultural land. Located in Fremont, Alameda County, California, the site is more than six miles away from the nearest known population of listed vernal pool branchiopods. The nearest listed branchiopod population, approximately 6.4 miles SSE of the site, vernal pool tadpole shrimp (*Lepidurus packardi*) are known from pools near San Francisco Bay National Wildlife Refuge (CNDDB, 2003).

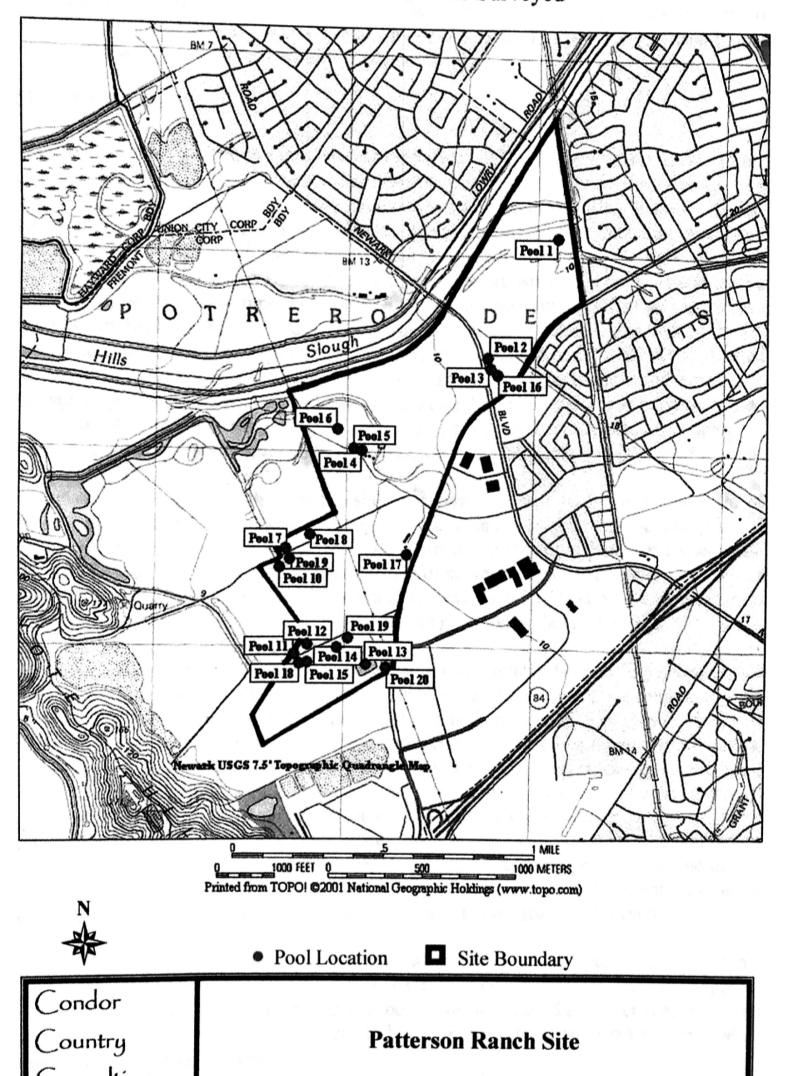
Wendy Weber of Condor Country Consulting conducted surveys to determine the extent of suitable habitat and the distribution of vernal pool branchiopods within the property boundaries. Verbal approval to conduct the surveys was received from Vincent Griego of the USFWS on December 23, 2002. Written authorization (1-1-04-PR-0047) was received on October 30, 2003 (Appendix A).

The following wet season report is submitted in accordance with the conditions of USFWS Permit TE-016591-2 (Appendix A). The format of the report follows the format outlined in the Guidelines (USFWS 1996).

METHODOLOGY

Prior to commencing surveys, a habitat assessment was performed by Condor Country Consulting in order to identify all potential habitat on the site. All identified suitable habitat was surveyed. A total of twenty pools were identified and surveyed (Figure 1). Surveys were conducted according to the methods described in the Guidelines (USFWS 1996). Surveys were initiated on December 27, 2002, approximately two weeks after some of the pools had filled to a depth greater than 3 cm. Surveys were conducted every

Figure 1. Patterson Ranch Location and Pools Surveyed



two weeks thereafter until May 15, 2003 when all pools were either dry or had been inundated for at least 120 consecutive days. The remaining survey dates were January 10 and 22, February 7 and 21, March 7 and 20, April 4 and 18, and May 1. Each pool's survey data were collected on data sheets (Appendix B).

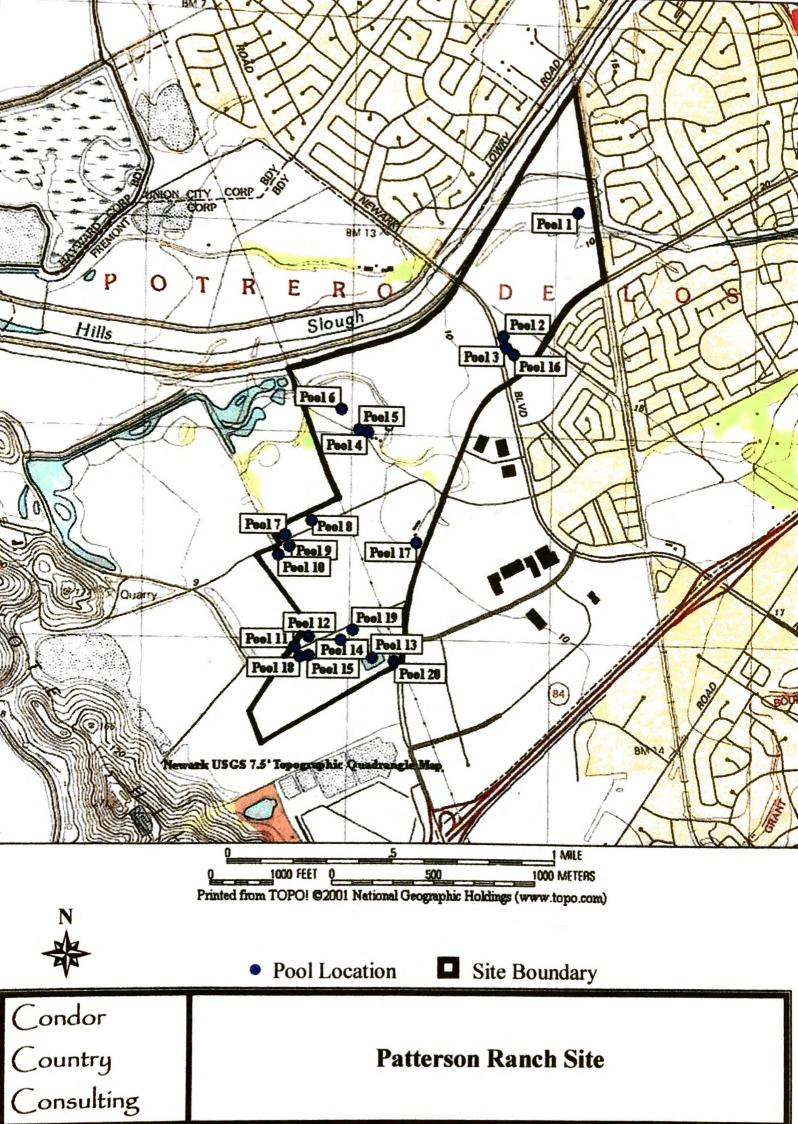
SURVEY RESULTS

No vernal pool branchiopods were detected during the 2002-2003 wet season survey effort and therefore none were collected. The distribution of other aquatic invertebrates and associated vertebrates detected during these surveys is described in this section. Habitat descriptions are also included. Data collected during each field visit, including water and air temperature, pool depth, and species observed, are included on the data sheets in Appendix B. The locations of the sampled pools are shown in Figure 1. Each pool's limensions, depth, habitat type, location, and faunal composition identified during surveys a shown in Table 1. Pools are dispersed throughout the site. Puddles, including Pool 1 and 19 are in the tire ruts of dirt roads. All ponded habitat typed "pool" or "converted harsh" is in areas that were converted to agriculture and have been cultivated for at least and last fifty years (Frisbie 2000). Two irrigation ditches and a detention pond were also arveyed. Although not typical habitat types elsewhere in California.

he dominant vegetation type on the site is cultivated wheat with some weedy forbs intermixed. Cultivation occurred throughout the entire site prior to the initiation of urveys. The southern portion of the area north of Ardenwood Boulevard was again ultivated between the seventh and eighth round of surveys, but subsequent to the affected pols' drying. Cattail marsh occurs in association with Pool 7. This pool is connected to everal drainage ditches and at these points cattails grow along the pool's edge.

he following is a list of the aquatic and semi-aquatic vertebrates and invertebrates that ere identified during sampling. The distribution of these species among the pools impled is shown in Table 1 and on the data sheets in Appendix B. Vertebrates identified the pools during the wet season surveys included Pacific treefrog (*Hyla regilla*) adults, ree-spined stickleback (*Gastrosteus aculeatus*), Canada goose (*Branta canadensis*), allard (*Anas platyrhynchos*), cinnamon teal (*Anas cyanoptera*), gadwall (*Anas strepera*), orthern shoveller (*Anas clypeata*), greater white-fronted goose (*Anser albifrons*), snow pose (*Chen caerulescens*), and small shorebirds. All bird species observed are common in winter) to habitats with standing water in the area. The site's proximity to the highly itable habitat of the San Francisco Bay and adjacent Coyote Hills Regional Park likely ntributed to the frequency, numbers, and diversity of avian species observed.

cific treefrog, also common at Coyote Hills, were associated with persistent, deep pools pools adjacent to such habitat. Three-spined sticklebacks, the only fish species served, were found in a long, narrow pool that was not directly connected to an igation water source. Fish likely entered this pool during a large storm event when ws crested the banks of the nearby canal.



two weeks thereafter until May 15, 2003 when all pools were either dry or had been inundated for at least 120 consecutive days. The remaining survey dates were January 10 and 22, February 7 and 21, March 7 and 20, April 4 and 18, and May 1. Each pool's survey data were collected on data sheets (Appendix B).

SURVEY RESULTS

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The dominant vegetation type on the site is cultivated wheat with some weedy forbs intermixed. Cultivation occurred throughout the entire site prior to the initiation of surveys. The southern portion of the area north of Ardenwood Boulevard was again cultivated between the seventh and eighth round of surveys, but subsequent to the affected pools' drying. Cattail marsh occurs in association with Pool 7. This pool is connected to several drainage ditches and at these points cattails grow along the pool's edge.

The following is a list of the aquatic and semi-aquatic vertebrates and invertebrates that were identified during sampling. The distribution of these species among the pools sampled is shown in Table 1 and on the data sheets in Appendix B. Vertebrates identified in the pools during the wet season surveys included Pacific treefrog (*Hyla regilla*) adults, three-spined stickleback (*Gastrosteus aculeatus*), Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), cinnamon teal (*Anas cyanoptera*), gadwall (*Anas strepera*), northern shoveller (*Anas clypeata*), greater white-fronted goose (*Anser albifrons*), snow goose (*Chen caerulescens*), and small shorebirds. All bird species observed are common (in winter) to habitats with standing water in the area. The site's proximity to the highly suitable habitat of the San Francisco Bay and adjacent Coyote Hills Regional Park likely contributed to the frequency, numbers, and diversity of avian species observed.

Pacific treefrog, also common at Coyote Hills, were associated with persistent, deep pools or pools adjacent to such habitat. Three-spined sticklebacks, the only fish species observed, were found in a long, narrow pool that was not directly connected to an irrigation water source. Fish likely entered this pool during a large storm event when flows crested the banks of the nearby canal.

Table 1.	Patterson	Ranch	Property	Pool	Attributes
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Pool #	Dimensions (meters)*	Depth (cm)*	Habitat Type	Location (Lat, Lon)	Chironomidae	Cladocera	Copepoda	Corixidae	Culicidae	Dytiscidae	Notonectidae	Ostracoda	Microturbellaria	Amphipoda	Hyla regilla Pacific treefrog	Waterfowl	Crayfish	Fish
1	1 x 2	14	Puddle	37° 34.081'N 122°03.546'W		X						X	X					
2	10 x 20	30	Pool	37° 33.787'N 122°03.822'W		X	X	X				X	X					
3	5 x 10	20	Pool	37° 33.760'N 122°03.794'W			X	X				X	x					
4	20 x 35	12	Converted Marsh	37° 33.496'N 122°04.241'W		X	X	X	x	X		X	x			x		
5	2 x 2	14	Converted Marsh	37° 33.497'N 122°04.249'W				Ĩ	X			X				x		
6	240 x 275	13	Converted Marsh	37° 33.519'N 122°04.325'W		X	X	X	X	x		X				x		
7	25 x 50	23	Converted Marsh	37° 33.225'N 122°04.534'W	X	X		X	X	x		X			adult	X		
8	40 x 50	16	Converted Marsh	37° 33.262'N 122°04.431'W	X	X	X	X		X	X	X				X		
9	30 x 100	30	Converted Marsh	37° 33.200'N 122°04.528'W	X	X	X	X			x	X	-	X	adult	X		
10	25 x 35	15	Converted Marsh	37° 33.167'N 122°04.557'W		X		X		X		X			adult	X	x	
11	20 x 45	11	Converted Marsh	37° 32.943'N 122°04.460'W		x		X		x		X				x	X	
12	25 x 100	15	Converted Marsh	37° 32.979'N 122°04.388'W			X	X		x		X				x		
13	110 x 110	25	Detention Basin	37° 32.939'N 122°04.205'W		X		X				X			adult	x		
14	10 x 150	17	Irrigation Ditch	37° 32.944'N 122°04.342'W		X	X	x				X						
15	12 x 200	15	Irrigation Ditch	37° 32.892'N 122°04.464'W	X		X	X		X		X				X	X	X
16	12 x 15	10	Pool	37° 33.734'N 122°03.768'W			x			X		X	X					
17	3 x 8	12	Pool	37° 33.198'N 122°04.089'W														
18	5 x 8	9	Pool	37° 32.897'N 122°04.478'W								X						
19	15 x 20	8	Puddle	37° 32.974'N 122°04.283'W								X						
20	10 x 20	15	Pool	37° 32.917'N 122°04.164'W		x		x		x		X						

*Maximum measured during entire survey period.

Many invertebrates were identified during sampling, including Notonectids (backswimmers), Corixids (water boatmen), Culicids (mosquito larvae), Dyticids (beetle larvae), Cladocerans (water fleas or daphnia), Copepods, Microturbellarians, Amphipods (scuds), Ostracods (seed shrimp), Decapods (crayfish), and Chironomids (midge larvae). All of these invertebrates, except crayfish, are typical of the fauna associated with still, periodically ponded freshwater habitats. The presence of crayfish indicates the close proximity of permanent or semipermanent water sources relative to the pools.

Most pools did not hold water continuously for the first eight rounds of surveys. Pools 1, 4, 7, 9, 13, and 20 were inundated for 120 consecutive days. Pools 16 through 19 held water for not longer than two consecutive survey rounds. The remaining pools were either inundated for seven survey rounds or were inundated and dried several times throughout the survey period. Ponding duration and frequency for each pool is recorded on the data sheets in Appendix B.

CONCLUSIONS

Although agricultural practices have altered the landscape on the Patterson Ranch site, vernal pool branchiopod habitat may never have existed there. Many portions of the site containing pool habitat appear to be converted freshwater marsh habitat. Pools were often adjacent to other properties containing marsh habitat. Aerial photos show evidence of old sloughs and creek channels criss-crossing much of the landscape. A high groundwater table, one to seven feet below the surface of the site according to hydrology studies performed by Balance Hydrologics, Inc. in 2000 and postulated to be the result of the building and operation of DUST Marsh on adjacent EBRPD land and water management practices of Alameda County Water District and Alameda County Flood Control and Water Conservation District, may also contribute to the filling of depressions resulting from cultivation practices (Frisbie 2000). A majority of the pools on the site appear to be formed in this way. The remaining puddles and detention basin were also unlikely to harbor vernal pool branchiopods without the benefit of a nearby source population. With the nearest known population more than six miles away and most of the surrounding habitat developed for housing or industrial parks, no source population is evident. Many of the pools contained a collection of invertebrate species typically associated with fairy shrimp and tadpole shrimp. However, no listed species were observed in any of the pools during this wet season survey. Therefore, a second round of surveys will be necessary to determine whether any of these pools contain listed vernal pool branchiopods.

REFERENCES

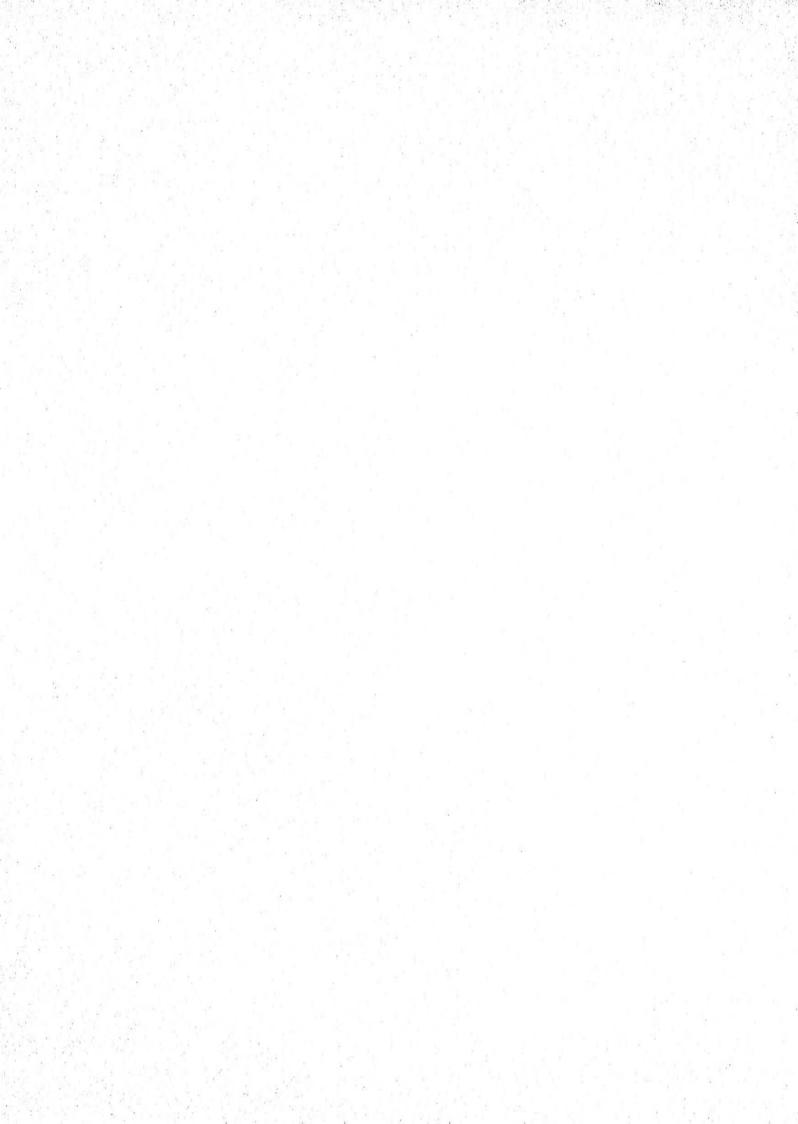
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U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey

Note: Please fill out the required information completely for each site visit.
This form is being submitted to serve as part of the 90-day report: no ves
Required color slides and/or photographs for the project site are included: no yes
"Date: 12/27/02 Time: 9:30 County: ALAMEDA Quad: NEWARK
Collector(s): WENDY WEBER Permit #: TE-016591-3
Site/Project Name: Pool #:
Township: Range: Section: latlong.
Temperature: Water: 12 °C Air: 15 °C
Pool Depth: at time of sampling: 1 cm Surface Area: at time of sampling: 10 m x 20 m
estimated maximum:cm estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: ' tire tracks garbage discing/plowing
- ungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: Agent cul tut e
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ :ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes: peregrine falcont eating till on telephone pole 1/2/27/0 210ggerhead Swrikes stong in telephone when (1/22/03) 1/10/03 12°CW 14°Ca 30 cm duep cor. micro. 1/22/03 pt°Cm 1/10°C 1 1
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Date: 12/27/02	Time: 9.00	County: A	AMEDA -	Quad: NE	WARK
Collector(s): WEN	JDY WEBER		Permit #:	TE-0165	91-3
Site/Project Name:	ARDENWOO	D		_ Pool #:	1
Township:	Range:	Section:		lat.	_long.
Temperature:	Water: 12	_•C	Air: 10	°C	
Pool Depth: at time of samp	ling: <u>5</u> cm	Surface Are at tim	a: e of sampling:	m x_	2_m
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U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of

magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONL (note reproductive status)

(note reproductive status)

Cladocerans:	yes no	Insects: (adult or larvae)
Conchostracans:	yes no	Anisoptera:	yes n
Copepods:	yes no	Zygoptera:	yes n
Ostracods	yes no	Hydrophilidae:	yes no
Fish	yes no	Dytiscidae:	yes ho
Frogs	yes no	Corixidae:	yes no
Salamanders	yes no	Notonectidae:	yes ho
Waterfowl	yes no	Belostomatidae:	yes no
Other (specify) _		Other (specify)	100 6

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be # Individuals

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Ostracods yes no	Zygoptera: yes /no)	
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U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey

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Required color slides and/or photographs for the project site are in	
"Date: 12/21/02 Time: 9:45 County: ALAMED	A. Quad: NEWARK
Collector(s): WENDY WEBER Perm	it #: TE - 016591-3
Site/Project Name: ARDENWOOD	Pool #: 3
Township: Range: Section:	latlong.
Temperature: Water: 12 °C Air: 1	<u>5</u> °c
Pool Depth: at time of sampling: <u>12 cm</u> Surface Area: at time of sampling: <u>12 cm</u>	ing: <u>5 m x 10 m</u>
estimated maximum;cm estimated maxim	mm:m xm
Habitat Condition: (circle where appropriate)	
- undisturbed disturbed: tire tracks garbage (discing/plowing
ungrazed grazed: cattle horses light moderate	sheep other heavy
- land use of habitat: agriculture	14.74 L
(Optional) Water Chemistry Data	
Alkalinity (total):ppm or mg/l Conductiv	rity:uMHO
Dissolved NH4:ppt or ppm Dissolved Oxyg	en:ppm or mg/l
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Anostracans: NONE (note reproductive status)		
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U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey

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Required color slides	and/or photographs	for the project site	are included: no	yes
Date: 12/21/02	Time: 10'20	County: ALAN	EDA Quad: 1	JEWARK
Collector(s): W.	WEBER		Permit #: <u>TE-0</u>	16591-3
Site/Project Name: _	ARDENWO	DD	Pool #:	4
Township:	Range:	Section:	lat	long.
Temperature:	Water: 14	_℃ Air:	10 0	
Pool Depth: at time of samp	oling: <u>5</u> cm	Surface Area: at time of s	ampling: <u>20</u> m	<u>35</u> m
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Habitat Condition: (c	ircle where appropr	iate)		
- undisturbed	disturbed:	tire tracks garba	ge discing/plowing	D
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317/03	10°	130	3cm	est, cul.

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Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Observations:

Cladocerans:	yes	Inch	insects: (adult of larvac)		0
Conchostracans:	-	1 1	Anisoptera:	yes	no
Copepods:	-	no	Zygoptera:	yes	no
Ostracods	yes		Hydrophilidae:	yes	no
Fish		DO	Dytiscidae:	yes	no
Frogs		no	Corixidae:	yes	DO
Salamanders	yes	00	Notonectidae:	yes	no
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Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species # Individuals Accession/Catalog # Pool # 11:45_3/20/03 $\frac{C_{00}}{25^{\circ}} \frac{C_{a}}{11^{\circ}} \frac{duptn(cm)}{3cm} \frac{Spp}{00t, 5cor}$ 11:45_m 4/4/03 18° 16° 71 cm 05t.

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Required color slide	s and/or photographs	for the project	ct site are include	d: no	yes
"Date: 12/27/ C	2-Time: 10:40	County: A	LAMEDA-	Quad: No	WARK
Collector(s): W. W	EBER		Permit #:	TE-DIL	2591-3
Site/Project Name:	ARDENWOO	00		Pool #:	5
Township:	Range:	Section:		lat	long.
Temperature:	Water: 14	_°C	Air: 14	°C	
Pool Depth: at time of san	npling: <u> </u>	Surface Ar at tir	ea: ne of sampling:	<u>2</u> m x	2_m
estimated ma	ximum:cm	estin	nated maximum:	m x	<u> </u>
Habitat Condition:	(circle where approp	riate)			
- undisturbed	disturbed	: tire tracks	garbage dis	cing/plowing	
- ungrazed	grazed:	cattle light	horses she moderate	eep oth heavy	er
- land use of	habitat: Ag	-	10	(
(Optional) Water O	Themistry Data				
Alkalinity (to	otal):ppm or	mg/l	Conductivity:	uMHO	С
Dissolved N	H4:ppt or ppm	Dis	solved Oxygen:_	ppm o	r mg/l
pH:	Turbidity: (s	ecchi disc dep	oth)cm or	clear to bot	tom
Salinity :	ppt or ppm	Total Dis	ssolved Solids (T	DS):	ppm
Notes: 1/10/03	13°Cw	15°Ca	14 cm	- deep	ost.
1/22/03	3 14°Cw	llec.	a 105 (m deep	o tra
(USFAWS 2-120/03	13°Cw 3 14°Cw dry 13°Cw 14°Cw 13°Cw 3 dry	1 15°Ca	100	n-	ost cul.
3/7/03	s drif	3/20/03	o drug		

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U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONC (note reproductive status)

(Optional) Species Observations: Cladocerans: yes(no) Conchostracans: yes mo yes to Copepods: (yes no Ostracods yes (bo Fish yes to Frogs yes Go Salamanders Waterfowl VED no Other (specify)

sects: (adult or larva Anisoptera:	yes	po
Zygoptera:	yes	no
Hydrophilidae:	yes	
Dytiscidae:	yes	no
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	no
Other (specify)		V

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species

Individuals

Accession/Catalog #

Pool #

4/4/03 day 4/18/03 day 5/1/03 day

Note: Please fill out the required information completely for each site visit.
in submitted to serve as part of the 90-day report: no ves
This form is being submittee and/or photographs for the project site are included: no yes Required color slides and/or photographs for the project site are included: no yes
Required color slides and/or photographic the ALAMEDA - Owned WENIAR K
Required color slides and or proceed and County: ALAMEDA - Quad: NEWARK
Permit #: $E=010911=0$
Site/Project Name: ARDENWOOD Pool #:
Township: Range: Section: latlong.
Temperature: Water: 13 °C Air: 16 °C
Pool Depth: at time of sampling: <u>B</u> cm Surface Area: at time of sampling: <u>B</u> cm at time of sampling: <u>300 m x 500 m</u>
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
-ungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: QQ
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes:
1/10/03 13°Cw 1/2°Ca 98 cm acep Ost., Canada gelle, male shorebrids
1/22/03 14°Cw 10°Ca 13 cm dup obti copi cor shormbut down 2/1/03 6°Cw 8°Ca 3cm dup ost, dad, cor, dyt. shallpoole 2/21/03 13°C 15°C 7 cm dup 05t, cope 3/7/03 10°C 13°C 5rin dup ost, clad, nul
down 2/7/03 6°Cw 8°Ga 3cm dup ust, dad, cor, dyt.
smillione 2/21/03 13°C 15°C 7 cm deep 05t, cope
3/7/03 10°C 13°C From dello och reladion

Note: Please fill out the required information completely for each site visit.
in submitted to serve as part of the 90-day report: no yes
This form is being submitted to the project site are included: no yes Required color slides and/or photographs for the project site are included: no yes
Required color slides and/or photographic ALAMEDA - Omad: NEWARK
Required color slides and or prove of County: ALAMEDA Quad: NEWARK
collector(s): W. WEBER Permit #: _E=010311=
Site/Project Name: ARDENWOOD Pool #:
Township: Range: Section: latlong.
Temperature: Water: 13 °C Air: 16 °C
Pool Depth: at time of sampling: <u>B</u> cm Surface Area: <u>at time of sampling:</u> <u>B</u> cm at time of sampling: <u>300 m x 500 m</u>
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
- ungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: QQ
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ : ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes:
1/10/03 13°Cw 16°Ca 98 cm deep Ost, Canada year,
1/22/03 14°Cw 10°Ca 13 cm dup ost, cop. cor sombut down 2/7/03 6°Cw 8°Ga 3cm dup ust, dad, cor, dyt. Joa manipole 2/21/03 13°C 15°C 7 cm dup 05t, dad, cor, dyt. 3/7/03 10°C 13°C 7 cm dup 05t, cope 3/7/03 10°C 13°C 5rm dup oct. clad. nul
down 2-7/03 6°Cw 8°Ca 3cm dup ust, dad, cor, dyt.
shallow 2/21/03 13°C 15°C Tom deep 05t, cope
3/7/03 10°C 13°C Frindwo nut relading

U.S. Fish and Wildlife Service Vernal Pool Data Sheet

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Sp

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Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Observations:

yes no Cladocerans: Conchostracans: yes no Copepods: yes no Ostracods yes no Fish yes no Frogs yes no Salamanders yes no Waterfowl (VES) no Other (specify)

Ins	ects: (adult or larva	c)	1
	Anisoptera:	yes	no
	Zygoptera:	yes	no)
	Hydrophilidae:	yes	no
	Dytiscidae:	yes	no
	Corixidae:	yes	no /
	Notonectidae:	yes	no/
	Belostomatidae:	yes	nø
	Other (specify)		

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be Species

Species		# Individu	als	Accession/Catalog #	-
3/20/03	<u>°Сш</u> 27°	<u>"Ca</u> 170	clipth Zcm	Clad, ost.	Pool #
4/4/03 (West	_		00001, 051.	
4/18/03	260	20°.	8 cm	none	
5/1/03		18	1 cm	ost	
5/15/03	asy				

(USFAWS IEV. 4/96)

U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey	6
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U.S. Fish and Wet Season Survey
Note: Please fill out the required information completely for each site visit.
itted to serve as part of the 90-day report: no _V yes
Note: Please fill out did roy This form is being submitted to serve as part of the 90-day report: no yes Required color slides and/or photographs for the project site are included: no yes
lor photoviaulis lot die projection
Min Time: I'V County The I'v
M MERE Permit #. 1E DIGUT
Collector(s): Pool #: Site/Project Name: ARDEN WOOD Pool #:
Site/Project Name: Section: lat. long.
Township: Range: Section: latlong.
Temperature: Water: 172 °C Air: 10 °C
Pool Depth: at time of sampling: <u>23 cm</u> Surface Area: at time of sampling: <u>50 m x 160 m</u>
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
- ungrazed: cattle horses sheep other light moderate heavy
- land use of habitat:
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
N.
1/10/03 19°C 19°Ca 20 cm deep gradwall, malbord, shorte
122/03 we have broke
h 2/1/02 . Tor ile il Ca 20 cm deep canged cor, ost, clad ymice
2/ alas IV IICa 20 andeep cor, cue ost. clad. antiherd, corrixid
Notes: 1/10/03 19°C~ 19°Ca 20 cm deep gradwall, malkord, shore 1/22/03 14°Cw 16°Ca 20 cm deep canged myre, shorebrids 2/21/03 7°Cw 11°Ca 20 cm deep canged corr, ost., clad. ymice 2/21/02 14°C 11°Ca 20 cm deep corr, cue. 05t. clad. doithicid, corrivid 2/21/02 14°C 11°C 20 under obt. clad. doithicid, corrivid 2/21/02 14°C 17°C 20 under obt. chad. mais post. while fronted gese, 10 the correction of the corrivid
or (no isource) m. GNONULA

PH.

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONC (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Obse	ervati	ons:
Cladocerans:	yes	no
Conchostracans:	yes	DO

yes	no	Inse	cts: (adult or larva	e)	0
yes	no		Anisoptera:	yes	no h
yes	no		Zygoptera:	yes	no/
yes	no	1	Hydrophilidae:	yes	no
yes	no		Dytiscidae:	yes	no
yes	no		Corixidae:	yes	no
yes	no		Notonectidae:	yes	no
(Jes)	no	mallard, Cinnsine,	Belostomatidae:	yes	ng
		14	Other (specify)		V
1	-		All the second second	100	

Voucher Specimens

(USFAWS rev. 4/96)

Copepods:

Ostracods

Salamanders

Monomia

Waterfowl Other (specify)

Fish

Frogs

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

on/Catalog # Pool #
(cm) 3pp
.cm cor, clad
cm clad, cor.
cun cor, chad, cul.

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Collector(s): W.WEBERE Pool #: B	
<td and="" color="" or="" product<="" slides="" td="" td<=""></td>	
Required color slides and/or providence Date: 12:50 County: ALAMEDA - Quad: NEWARK Date: 12:50 County: ALAMEDA - Quad: NEWARK Collector(s): W.WEBER Permit #: TE -016591-3 Collector(s): W.WEBER Pool #: 6	
Date: 12/27/02 Time: 1000 Collector(s): W.WEBER Permit #: TE-016591-3 Collector(s): W.WEBER Pool #: B	
Collector(s): W.WEBERE Pool #: B	
Name: ARDENWARP TOUM.	
an ARDENWOOD TOUM.	
Site/Fight	
Site/Project Manary Range; Section: latlong.	
The lo c Air: 10 °C	
Temperature: water: Surface Area:	
at time of sampling: 15 cm at time of sampling: <u>TO m x 50 m</u>	
estimated maximum:m xm	
Habitat Condition: (circle where appropriate)	
- undisturbed disturbed: tire tracks garbage discing/plowing	
ungrazed grazed: cattle horses sheep other light moderate heavy	
- land use of habitat: Qg-	
(Optional) Water Chemistry Data	
Alkalinity (total):ppm or mg/l Conductivity:uMHO	
Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l	
pH: Turbidity: (secchi disc depth)cm or: clear to bottom	
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm	
roles:	
1/10/03 15 °Cw 19°Ca 16 an deep dytic, ost, cor.	
1/22/03 14 °Cm 110°Ca 16 an deep dytic, ost., cor.	
1/22/03 14 °Cw 16°Ca 15 cm deep 05t. 10pl, clad, cor., ma2/1/03 7°Cu 16°Ca 15 cm deep 05t. 10pl, clad, cor.,	
2/2/03 TCus 11°C2 Tour days reid, counder	
2/2/03 14°C 16°Ca 16 cm deep 05t. , cope, clad, cor., 2/2/03 7°C us 11°Ci Tom deep 05t. , cope, clad, cor., 2/2/03 14°C 11°Ci Tom deep 2000, dyticid, commu	

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Observations:

Cladocerans: yes ho Conchostracans: yes no Copepods: yes no Ostracods yes no Fish yes no Frogs yes no Salamanders yes no Waterfowl yes no Other (specify)

yes	no
yes	no
yes	no
yes	ng
Tes	no
yes	10
yes	no
	24

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	L	Individuals	Accession/Catalog #	Pool #
5 m 3/7/03 3/20/03	<u>Cw</u> 13- 25°	<u>Ca</u> 140 17	15 cm 10 cm	Clad, cor, clave, dyt.
4/4/03 4]18/03		20°	12 cm	ost, cor, cape, clud beetle
5/15/03	22° dry	19*	16cm	beetle; ost, clad, cor

(USFAWS IET. 4/96)

	Wildlife Service Vernal Pool Data Sheet Wet Season Survey	
U.S. Fish and	Wet Season Survey	

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Note: Please fill out the required information completely for each site visit.
Note: Please fill out the required to the 90-day report: no yes
turn is being submitted to serve as part of a province of a province of a province of the serve included:
This form is being submitted to serve
W WEEK
Collector(s): Pool #: Pool #:
Sim Project Name:
Sim Project Num Range: Section: latlong.
Temperature: Water: 13 °C Air: 10 °C -
Pool Depth:
at time of sampling: can at the of our ping
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- unfisturbed disturbed: tire tracks garbage discing/plowing
- ungrazed; cattle horses sheep other
light moderate heavy
- land use of habitat: ag
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth) cm or: clear to bottom Salinity -
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm Notes:
1/22/03 15°Cw 19°Ca 30 cm deep shoreburds,
1/22/03 14°Cup 1/0 °C 20 Cor, amply pads
21/03 1 million 1 Ca De Condeep cor, amphipidion, 190
2/21/03 12 11 Ca 30 an dup coper 10st, clad, 0 600
1/22/03 14°Cw 14°Ca 20 cm deep cor, amplipades. 2/103 1°Cw 11°Ca 20 cm deep cor, amplipados. Hyp 2/21/03 13°C 11°Ca 30 cm deep core, out, clad, ~ 6 m chare bordes.

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Observations:

Cladocerans:	yes no	Insects: (adult or larvae)
Conchostracans:	yes no	Anisoptera: yes no
Copepods:	yes no	Zygoptera: yes no
Ostracods	yes no	Hydrophilidae: yes no
Fish	yes bo	Dytiscidae: yes no
Frogs	DO HYRE adu	dt Corixidae: (yes) no
Salamanders	yes no	Notonectidae: yes no
Waterfowl	(TES no mallouds	Belostomatidae: yes no
Other (specify)		Other (specify)

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	# Indivi	duals	Accession/Catalog #	Pool #
925 m 3/7/03	Luc	"Ca	depth (cm)	spp.
3/20/03	190	140	30cm	cor, clad, noto
	19-	no	30cm	clad, cor.
4/4/03	190	15°	25cm	ost, cor, clad.
				confeer autor

(USF&WS 101, 4/96)

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0.3	ife Service Vernal Pool Data Sheet et Season Survey
ent out the requ	uired information completely for each site visit.
Note: Please fill out the Port	part of the 90-day report: no yes as for the project site are included: no yes
is being submitted to serve as	part of all set of a
This form is outles and/or photograph	s for the project site are included: no yes County: <u>ALAMEDA</u> Quad: <u>NEWARK</u>
Required color sinces and	County: ALAMEDA Quad: NEWARK
Date: 12/21/02 Time	County: <u>ALAMEDA</u> : Quad: <u>NEWARK</u> Permit #: <u>TE-016591-3</u> Pool #: <u>ID</u>
culector(s): W. WEBER	
Collectory Name ARDENWOO	D Pool #: 10
Site/Project Name.	Section:latlong.
Tunger	
Temperature: Water: 13	<u>3</u> ℃ Air: <u>110</u> ℃
	Surface Area:
Pool Depth: at time of sampling: <u>10</u> cm	at time of sampling: <u>25 m x 35 m</u>
estimated maximum:cm	estimated maximum:m xm
	ariate)
Habitat Condition: (circle where approp	
- undisturbed disturbed	d: tire tracks garbage discing/plowing
ungrazed grazed:	cattle horses sheep other
Brinner Brinner	light moderate heavy
- land use of habitat: ag	
/)	
(Optional) Water Chemistry Data	
Alkalinity (total):ppm or	r mg/l Conductivity:uMHO
Dissolved NH .	
Dissolved NH ₄ :ppt or ppm	
pH: Turbidity: (se	ecchi disc depth) cm or: clear to bottom
pH: Turbidity: (se	ecchi disc depth) cm or: clear to bottom
pH: Turbidity: (se	
pH: Turbidity: (se Salinity :ppt or ppm Notes:	ecchi disc depth) cm or: clear to bottom Total Dissolved Solids (TDS): ppm
pH: Turbidity: (se Salinity :ppt or ppm Notes:	ecchi disc depth) cm or: clear to bottom Total Dissolved Solids (TDS): ppm
pH: Turbidity: (se Salinity :ppt or ppm Notes:	ecchi disc depth) cm or: clear to bottom Total Dissolved Solids (TDS): ppm
pH: Turbidity: (se Salinity :ppt or ppm Notes:	ecchi disc depth) cm or: clear to bottom Total Dissolved Solids (TDS): ppm
pH: Turbidity: (se Salinity :ppt or ppm Notes:	ecchi disc depth) cm or: clear to bottom

U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey
U.S. Wet Season Survey
Note: Please fill out the required information completely for each site visit.
Note: Please fill out the required information competency no yes This form is being submitted to serve as part of the 90-day report: no yes
This form is being submitted to the project site are included: no yes
This form is being submitted to serve as part of the project site are included: no yes Required color slides and/or photographs for the project site are included: no yes County: ALAMEDA_ Quad: NEWARK
Required color slides and/or photographs for the project site Lender Quad: NEWARK "Date: <u>12/21/02</u> Time: County: <u>ALAMEDA</u> Quad: <u>NEWARK</u> "Date: <u>12/21/02</u> Time: Permit #: <u>TE-016591-3</u>
"Date: 12/21/02 Time: Permit #: TE-016591-3 Collector(s): W. WEBER Permit #: TE-016591-3 Collector(s): W. WEBER Permit #: TE-016591-3
Collector(s): <u>IV. Protector</u> Pool #: <u>IO</u>
Site/Project Name: ARDENWOOD Pool #: 10
Teamship: Range: Section:
Temperature: Water: 13 °C Air: 10 °C
Pool Depth: Surface Area: 10 cm at time of sampling: 25 m x 35 m
at time of sampring.
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
-ungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat:
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
월 - 그 것 같아 있는 것 것 같아 생각한 것이 같아 있는 것 같아 같아 같아 있는 것 같아. 것 같아 있는 것 같아 있는 것 같아 있는 것 같아. 것 같아 있는 것 같아 있는 것 같아. 것 같아 있는 것 같아 있는 것 같아. 것 같아 있는 것 같아. 한 것 같아. 것 같이 것 같아. 것 같아. 것 같아. 것 같이 것 같아. 것 ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm Notes:
dt
1/10/03 15°Cw 19°Ca 15 an deep Crayfish, duy, 1/22/03 14°Cw 14°Ca 12 an deep Cor, duy, or, 2/7/03 9°Cw 12°Ca 12 an deep Cor, duy, sort, 2/2/03 9°Cw 12°Ca 8 cm deep os, clad, cor.
1/22/02 140
Assams in the 19 Cw 16°Ca 120, class carding of
1/22/03 14°Cw 14°Ca 15 an deep Crayfish, duf, 2/7/03 9°Cw 12°Ca 120m deep Cori, duf , ort, 2/2/103 9°Cw 12°Ca 8 cm deep 001, duf , ort,
2/21/02 12 Ca Schaller Ssi, clar, con

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NO NE (note reproductive status)

(Optional) Species Observations:

Cladocerans: yes (no) Inse Conchostracans: yes no Copepods: yes no Ostracods yes no Fish yes no/ Frogs 5 no type adult yes (bo) Salamanders 15 00 mallord Waterfowl Other (specify)

Anisoptera:	yes	(no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	ng
Corixidae:	B	no
Notonectidae:	yes	no
Belostomatidae:	yes	10
Other (specify)		_

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	# Ind	ividuals	Accession/Catalog #	Pool #
37/03	<u>C w</u> 12°	<u>"(a</u> 14"	depth (an) 13002	Cled, o st, &r-
320103	255	סרו	11 cm	est, Cor-
4/4/03	dry			
4/10/03	25	20°	Ham	beetle
5/1/03 5/15/03	21° dony	17'	10 cm	ost
	0			

U.S. Fish and	Wildlife Service Vernal Pool Data Sheet Wet Season Survey	

Wet Season Survey	
Note: Please fill out the required information completely	y for each site visit.
Note: Please in our as part of the 90-day report:	no yes
This form is being submittee the project site are incl	uded: no ves
This form is being second or photographs for the project site are incl Required color slides and/or photographs for the project site are incl	· Ounds L KEALAOU
Required color shall Time: 145 County: ALAMEDA	Quad: NEWARK
Collector(s): W. WEBER Permit	#: <u>TE-016591-3</u>
Site/Project Name: ARDENWOOD	Pool #: 1
Township: Range: Section:	
Temperature: Water: 13 °C Air: 14	_•C
Pool Depth: Surface Area:	10 11-
at time of sampling: <u>O</u> cm at time of sampling:	<u>20 mx 45 m</u>
estimated maximum:cm estimated maximum	::m xm
Habitat Condition: (circle where appropriate)	
- undisturbed disturbed: tire tracks garbage de	iscing/plowing
ungrazed grazed: cattle horses sh	heep other
light moderate	
- land use of habitat: O.g	
(Optional) Water Chemistry Data	
Alkalinity (total):ppm or mg/l Conductivity:	-MIIO
Dissolved NH -	uMHO
pH:ppt or ppm Dissolved Oxygen:	ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: Salinity :	clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TI Notes:	
1/10/03 1/000	
\$ 1/22/02 10°Cn 17°Ca 11 c	in deeps ost car.
2/7/03 14 Cw 1400 0	
12:50 2/21/02 dry	cm deep of, cor. butle,
10 10 3/7/02 20°C 16°C	Charffish
1/22/03 14°Cw 17°Ca 11 c 2/7/03 duy 12:50 2/21/03 duy 10 10 3/7/03 20°C 16°Ca 10 10 10 3/7/03 . 17° 14°	Chayfish Ban ort. Ban ost, chad.
	ost, clad.

				- Andrewson and a state
	S. Fish and Wildlife	Service Vernal Pool Data Sheet		
U U	Wet S	eason Survey		
		in an analytic tor car	h site visit.	
Note: P	lease fill out the require	d information completely for eac		4
		of individuals present in terms of	f an order of	
Species Observed: s	ide (e.g., 10's, 100's, 1	000's)		
magnuto	uc (o.g., 10 c)			
Anostracans:				
(note reprodu	ictive status)			
Notostracans:				
(note reprodu	uctive status)			
(Optional) Species (Observations:			
Cladocerans:	/	Insects: (adult or lar	yes no	
Conchostraca	ins: yes no	Anisoptera: Zygoptera:	yes no	M 1
Copepods:	yes no	Hydrophilidae		
Ostracods	yes no	Dytiscidae:	yes no	- I
Fish	yes no	Corixidae:	yes no	
Frogs Salamanders		Notonectidae:		
Waterfowl	(TES) 110 Canada	goose Belostomatida		
Other (specif	\sim	Other (specify	0	
Voucher Specimens	5			
1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -			1:1.4	-
Specimens shall be accessioned.	preserved according to	the standards of the institution in	n which they will be	
Species	# Individuals	Accession/Catalog #	Pool #	
			ACCESSION OF	
4/4/03 de	ef			
				(
dialan d	5.1			
4/10/03 a	al al			
shilos d	54			
4/18/03 d 5/1/03 d	F	0.1		
				N

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Note: Please fill out the required information completely for each site visit.
inted to serve as part of the 90-day report: no ves
This form is being submitted to come to the project site are included: no yes Required color slides and/or photographs for the project site are included: no yes
in 27/02 Time: 1:25 County: With the print
Date: 10200 Date: 10200 Permit #: TE-016591-3 Collector(s): W.WEBER
Collector(s): ARDEN WOOD Pool #: Site/Project Name: ARDEN WOOD Pool #:
Site/Project Name:
Township: Range: Section: latlong.
Temperature: Water: 13 °C Air: 16 °C
Pool Depth: at time of sampling: 10 cm Surface Area: at time of sampling: 25 m x 100 m
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
- ungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: any
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ :ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes:
1/10/03 16°Cw 17°Ca 15 cm deep cor, shorebinds
1/22/03 14 00 1
1/10/03 1/6°Cw 17°Ca 15 cm deep Cor, shorebinds 1/22/03 1/4°Cw 1/6°Ca 9 en deep cor, dyt, bel 2/21/03 olig 1 2/21/03 22°Cw 1/6°Ca 60m of cope
2/21/03
2/7/2 22°Cw 16°Ca 60m 000, cope

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

- (Optional) Species Observations: Cladocerans: yes no
 - Conchostracans: yes no Copepods: yes no Ostracods yes no Fish yes no Frogs yes no Salamanders yes no Waterfowl Do canada goose Other (specify)

Insects: (adult or larvad	:)	-
Anisoptera:	yes	
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	1 · · · · ·
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	no
Other (specify)	311	0

14

Pool #

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned. Species # Individuals Accession/Catalog #

3/20/03	dry
4/4/03	cory
4/4/03 4/18/03	day
5/1/03	day

(USFAWS HEY 4/96)

U.S.	Fish	and		S		Pool	Data Sheet	
			Wet S	eason S	urvey			

		Wet Season Survey	ai rooi Data Sneet /	5
S Note: Pl	ease fill out the re	quired information	completely for each :	site visit.
This form is being s	ubmitted to serve a	as part of the 90-da	y report: no	yes
Required color slides	and/or photograp	hs for the project	site are included:	no yes
"Date: 12/27/0	2-Time: _ 2.pr	n County: AL	AWEDA Quar	I: NEWARK
Collector(s): W.	The second s			
Site/Project Name: _				
Township:				
Temperature:				
Pool Depth: at time of sam	pling: <u>20</u> cm	Surface Area: at time	of sampling: <u>110</u>	_m x <u>110</u> _m
estimated max	imum:cm	estimate	d maximum:	_m xm
Habitat Condition: (circle where appro	priate)		x =
- undisturbed	disturbe	d: tire tracks ga	urbage discing/plo	wing
ungrazed	grazed:	A 1035	orses sheep oderate heav	other
- land use of h	abitat: reserv	INTY?	al solo l	
(Optional) Water Ch	emistry Data	3		
Alkalinity (tota	al):ppm or	rmg/l C	onductivity:uN	ИНО
Dissolved NH	:ppt or ppm	Dissolve	ed Oxygen:pp	m or mg/l
pH:	Turbidity: (s	ecchi disc depth)_	cm or: clear to	bottom
Salinity :	_ppt or ppm	Total Dissolve	ed Solids (TDS):	ppm
Notes: 1/10/03	15 %~	16 °Ca	25 cm all	Cor., Clad., ost.
1/22/03 2/7/03	14 °Cw 11°Cw	112 °Ca 192a	24 cm deep	Cor, clad, HYRG, mariana Cor, clad Cor. slad
2/21/03	18°Cw	16 (a	23cm	Cor. slaf

	Vernal Pool Data Sheet
U.S. Fish and Wi	Idlife Service Vernal Pool Data Sheet Wet Season Survey
	Wet Season Survey required information completely for each site visit. nate # of individuals present in terms of an order of
Species Observed: state none or call magnitude (e.g., 10's, 10	00's, 1000's)
Anostracans: NONE (note reproductive status)	
Notostracans: NONE (note reproductive status)	
(Optional) Species Observations:	Insects: (adult or larvae)
	Anisoptera: yes no
	Zygoptera: yes no
	Hydrophilidae: yes no
	Dytiscidae: des no
Fish yes up	pe adult Corixidae: TE no
Frogs Ves no To	Notonectidae: yes (no)
Waterfowl yes no	Belostomatidae: yes no)
	Note: Please fill out the n Species Observed: state none or estim magnitude (e.g., 10's, 10 Anostracans: NONE (note reproductive status) Notostracans: NONE (note reproductive status)

Voucher Specimens

(USFAWS IN. 4/96)

Specimens shall be preserved according to the standards of the institution in which they will be accessioned. # Individuals

Pool #

Species

Accession/Catalog # depth (cm) spp. 23cm Clad, cor 9 cm ost, cor Ca °C 10 10pm 3/20/03 21 2°m-4/4/03 23° 170 150

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Note: Please fill out the required information completely for each site visit.
This form is being submitted to serve as part of the 90-day report: no yes
Required color slides and/or photographs for the project site are included: no yes
"Date: 12/27/02 Time: 2.15 County: ALAMEDA Quad: NEWARK
Collector(s): W. WEBER Permit #: TE-016591-3
Site/Project Name: ARDENWOOD Pool #:
Township: Range: Section: latlong.
Temperature: Water: 13 ℃ Air: 14 ℃
Pool Depth: at time of sampling: 12 cm Surface Area: at time of sampling: 10 m x 150 m
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
- ungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: Qq
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ :ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes: 1/10/03 15°Cw 16°Ca 15em deep 05t.
1/22/03 14°Cw 14°Ca 17 cm deep cor. 2/7/03 12°Cw 15°Ch 50m deep cor. 2/2/03 20°Cw 16°Ca 15 cm oct cope.
russensing 103 19°C w 15°Ch 5 and deep ost chad, cope,
2/2/03 20°Cw 16°Ca 15 cm ost cope.

Note: Please fill out the required information completely for each site visit. Species Observed: state none or estimate # of individuals present in terms of an order of

magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Observations:

Cladocerans: yes no Conchostracans: yes/no Copepods: yes no Ostracods yes no Fish yes no Frogs yes no Salamanders yes no Waterfowl yes no Other (specify)

Anisoptera:	yes	ho
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	no
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	nø
Other (specify)	. (5

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be

Species # Individuals Accession/Catalog # Pool # °Ca 300 0/20/03 25° 17° depth (cm ret jor. 4/4/03 dry 4/18/03 dry 5/1/03 dry Ban

(USF&WS tev. 4/96)

Note: Please fill out the required information completely for each site visit.
This form is being submitted to serve as part of the 90-day report: no yes
Required color slides and/or photographs for the project site are included: no yes
Date: 12127102 Time: 2:25 County: ALAMEDA Quad: NEWARK
Collector(s): W. WEDER Permit #: TE-016591-3
Site/Project Name: ARDENWOOD Pool #: 15
Township: Range: Section: latlong.
Temperature: Water: 13 °C Air: 16 °C
Pool Depth: at time of sampling: 13 cm Surface Area: at time of sampling: 12 m x 200 m
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
cungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: act
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ :ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes: 1/10/03 19°Cw 16°Ca 14 cm deep mt. landa sees
1/22/03 14°Cw 110°Ca 15 cm deep ant, craypish, swell pell,
USFames no. 1900 13°CW 14°E 11cm deup dutrad, canada yeur
1/22/03 14°Cw 16°Ca 15 cm deep ort. (roughsh, smell fell, 110m 2/1/03 13°Cw 14°Ca 11 cm deep ort. (roughsh, smell fell, 105FAWS m. 1980 2/21/03 20°Cw 16°Ca 15 cm deep ort., Cop, cor, chird 2/21/03 20°Cw 16°Ca 15 cm deep ort., Stickleback. for

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NONE (note reproductive status)

Notostracans: NONE (note reproductive status)

(Optional) Species Observations:

Cladocerans: yes(no) Conchostracans: yes no Copepods: ves no Ostracods Jes no Fish yes no Frogs yes no Salamanders yes no Waterfowl yes no Other (specify)

Anisoptera:	yes	(no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	no
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	no/
Other (specify)		V

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species # Individuals Accession/Catalog # Pool # pth (cm 10:20 3/1/03 16° 3/20/03 dry 4/4/03 dry 4/18/03 dry 5/1/03 dry 1054, Cor, clad, Brokidar. 150

(USFAWS rev. 4/96)

Note: Please fill out the required information completely for each site visit.
This form is being submitted to serve as part of the 90-day report: noyes
Required color slides and/or photographs for the project site are included: no yes
Date: 01/10/03 Time: County: ALAMEDA Quad: NEWARK
Collector(s): W. WEBEP Permit #: TE-016591-3
Site/Project Name:
Township: Range: Section: lat long.
Temperature: Water: 12 °C Air: 14 °C
Pool Depth: at time of sampling:O cm Surface Area: at time of sampling:O cm at time of sampling:T m xS m
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
ringrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: far wing
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes: 1/22/03 14°Cw 16°Ca 9 cm deep oft., cope, micro, aut 2/2/03 dryp
Notes: 1/22/03 14°C 14°C a 9 cm deep 04. 10°C, micro, ayt 2/7/03 dry 2/21/03 Oldy 1 3/7/03 Oldy 1 3/7/03 Oldy 1

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: None (note reproductive status)

Notostracans: Nonl (note reproductive status)

(Optional) Species Observations:

Cladocerans:	yes no	
Conchostracans:	: yes no	
Copepods:	yes no	
Ostracods	(yes no	
Fish	yes no	
Frogs	yes no	
Salamanders	yes no	
Waterfowl	yes no	-Mc-
Other (specify)	microhisterlaria	5

Insects: (adult or larva	c)	0
Anisoptera:	yes	no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	no
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	no
Other (specify)		~

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	# Individuals	Accessio	n/Catalo	g#	Pool	ž
4/4/03	abry - field disked dry	between	kst	survey	and	Huis.
\$5/1/03	3 dry					1
	0					

(USFAWS rev. 4/96)

Note: Please fill out the required information completely for each site visit.
This form is being submitted to serve as part of the 90-day report: no yes
Required color slides and/or photographs for the project site are included: no yes
"Date: 01/10/03 Time: County: ALAMEDA Quad: NEWARK
Collector(s): WWEBER Permit #: TE-O16591-3
Site/Project Name: ARDENWOOD Pool #: 17
Township: Range: Section: latlong.
Temperature: Water: 15 °C Air: 19 °C
Pool Depth: at time of sampling: 12 cm Surface Area: at time of sampling: 3 m x 8 m
estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
rungrazed grazed: cattle horses sheep other light moderate heavy
- land use of habitat: Rg
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ :ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth)cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes: Home 1/22/03 14°Cw 16°Ca 6 cm deep 21 2/2/03 deer
Notes: 4/pone 1/22/03 14°Cw 16°Ca 6cm deep 10:31 2/7/03 day 12:40 2/21/03 day 10000 3/7/03 day 12:25pm 3/20/03 day

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: Monul (note reproductive status)

(note reproductive status)

(Optional) Species Observations:

Cladocerans: Conchostracans:	Jes Tao	Insects: (adult or larvae)	
Copepods: Ostracods Fish Frogs Salamanders Waterfood	yes no yes no yes no yes no yes no yes no yes no yes no	Anisoptera: Zygoptera: Hydrophilidae: Dytiscidae: Y Corixidae: Y Notonectidae: Y	

Voucher Specimens

Specimens shall be preserved according to the standards of the instituaccessioned.

-	00	viduals	Accession		which they will	be
4/4/03	25.	<u>Ca</u> 15°	Om dup	- <u>Spp</u>	Pool#	
4/18/03	any		0	none	1	
5/1/03	04.	90				
5/15/03	duy		4 cm	none		
	0					

2

		dlife Service Vernal Vet Season Survey	Pool Data Sheet	
Note: P	lease fill out the re	quired information c	ompletely for each site	visit.
This form is being s	submitted to serve a	is part of the 90-day	report: no	yes
Required color slide	s and/or photograp	hs for the project sit	e are included: n	o yes
"Date: 01 10 10	2 Time:	County: ALA	MEDA Quad:	NEWARK
Collector(s): W	VEDER_		Permit #: TE-Ol	1391-3
Site/Project Name:	ARDENI	aop	Pool #:	18
Township:	Range:	Section:	lat	long.
Temperature:	Water: 15	∑ °C Air:	16 0	
Pool Depth: at time of sam	pling: <u> </u>	Surface Area: at time of s	sampling: <u> </u>	x_@_m
estimated maxi	imum:cm	estimated r	maximum:m	xm
Habitat Condition: (c	ircle where approp	oriate)		(*
- undisturbed	disturbed	I: tire tracks garbo	age discing/plowing	5
- ungrazed	grazed:	cattle horse light mode	and the second se	ber
- land use of ha	abitat: ag	Character -		1
(Optional) Water Che	mistry Data			
Alkalinity (tota	l):ppm or	mg/l Cond	luctivity:uMHC)
Dissolved NH4	ppt or ppm	Dissolved (Oxygen:ppm or	mg/l
pH:	Turbidity: (se	cchi disc depth)	_cm or: clear to both	om
Salinity :	ppt or ppm	Total Dissolved S	Golids (TDS):	opm
Notes: 1/22/03	14 °C w	14 2.	4 con dee	ep out.
2/7/03 d	ry 3	20/03 du	1-	
3/7/03 045	y	1	Han dee	

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: NON (note reproductive status)

Notostracans: NONO (note reproductive status)

(Optional) Species Observations:

Cladocerans: yes no Conchostracans: yes no Copepods: yes no Ostracods (98) DO Fish yes no Frogs yes no Salamanders yes no Waterfowl yes be Other (specify)

Insects: (adult or larva	ac)	-
Anisoptera:	yes	no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	DO
Corixidae:	yes	
Notonectidae:	yes	DO
Belostomatidae:		no
Other (specify)	1001	-

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be

Accession/Catalog #

Pool #

4/4/03 dry 4/10/03 dry 5/1/03 dry

ILSFAWS IN 496

I	U.S. Fish and Wildlife Service Vernal Pool Data Sheet Wet Season Survey
	Note: Please fill out the required information
1	
ļ	counter the state of the state
ļ	County At ALLCON
	Con-
	SIEPHOJECT THERE IN VOLD
Į	Township Kange: Section
l	Temperature: Water: 15 °C Air: 17 °C
1	at time of sampling: Scm Surface Area: at time of sampling: Smx 20m
F	estimated maximum:cm estimated maximum:m xm
L	Habitat Condition: (circle where appropriate)
Π	- undisturbed disturbed: tire tracks garbage discing/plowing
Ę	-ungrazed grazed: cattle horses sheep other light moderate heavy
i	- land use of habitat: ag
	(Optional) Water Chemistry Data
	Alkalinity (total):ppm or mg/l Conductivity:uMHO
	Dissolved NH4:ppt or ppm Dissolved Oxygen:ppm or mg/l
1	pH: Turbidity: (secchi disc depth) cm or: clear to bottom
-	Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
-	Notes: NONG
	1/22/03 14 °Cw 14°Ca 3 cm deep of 2/7/03 dref 1/2/03 d
1	2/7/03 dry
1	3/1/03 dry

beiti

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: (note reproductive status)

Notostracans: (note reproductive status)

Cladocerans:	yes	no
Conchostracans:	yes	DO.
Copepods:	yes	no
Ostracods	yes	BO
Fish	yes	DO
Frogs	yes	no
Salamanders	yes	no
Waterfowl	yes	no
Other (specify)		2

ects: (adult or larva	ic)	n.
Anisoptera:	yes	no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	BO
Corixidae:	yes	00
Notonectidae:	yes	DO
Belostomatidae:	yes	100/
Other (specify)		9

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species

1.5FAWS IN. 49

Individuals

Accession/Catalog #

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Pool #

U,

4/18/03 dry 4/18/03 dry 5/1/03 dry

U.S. Fish and Wildlife Service Vernal Pool Data Sheet
- Sur Sur Yey
Note: Please fill out the required information completely for each site visit.
succurrent to serve as part of the 90 days
and/or photographs for the second states and/or photographs for the second states and/or photographs for the second states and second stat
Site/Project Name: <u>ARDENWCOD</u> Permit #: <u>IE-016591-3</u> Township: <u>Bange</u> Pool #: <u>10</u>
Township: Range: Section: latlong.
Temperature: Water: 15 °C Air: 16 °C
Pool Depth:
at time of sampling: 13 cm Surface Area: at time of sampling: 10 m x 20 m
estimated maximum:cm estimated maximum:m xm
Habitat Condition: (circle where appropriate)
- undisturbed disturbed: tire tracks garbage discing/plowing
grazed: cattle horses sheep other light moderate heavy
- land use of habitat: ag
(Optional) Water Chemistry Data
Alkalinity (total):ppm or mg/l Conductivity:uMHO
Dissolved NH ₄ :ppt or ppm Dissolved Oxygen:ppm or mg/l
pH: Turbidity: (secchi disc depth) cm or: clear to bottom
Salinity :ppt or ppm Total Dissolved Solids (TDS):ppm
Notes:
1/22/03 14°Cw 14°Ca 15 an deep convid
11:37au 2/7/03 12°CW 15°Ca 10 cm deep clad, ost, cor
Notes: 1/22/03 14°Cw 14°Ca 19 an deep consid 1/22/03 14°Cw 14°Ca 19 an deep consid 11:37au 2/7/03 12°Cw 15°Ca 10 cm deep clad, ost, cor 11:37au 2/21/03 20°C 16°Ca 13 cm deep clad, ost, cor 149000 2/21/03 20°C 16°Ca 13 cm deep clad, ost, cor
11:03 3/7/03 17° 15° 11cm cor, ost, clad, bette

Note: Please fill out the required information completely for each site visit.

Species Observed: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: none (note reproductive status)

Notostracans: None (note reproductive status)

(Optional) Species Observations: Cladocerans: yes no Conchostracans: yes no Copepods: yes no Ostracods Jes no Fish yes Do Frogs yes no Salamanders yes no Waterfowl yes no Other (specify)

sects: (adult or larva Anisoptera:	yes	no
Zygoptera:	yes	
Hydrophilidae:	yes	no
Dytiscidae:	yes	
Corixidae:	yes	
Notonectidae:	yes	
Belostomatidae:	yes	no
Other (specify)		

Voucher Specimens

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Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	# Indiv	iduals	Accession/Catalog #	<u>Pool #</u>
3/20/03	° <u>Cro</u> 25°	<u>Ca</u> 17°	depth (cm) 13	Spp. Ost, clad, cor, bette
4/4/03 4/18/03	25"	15°	H	ost, clad, cor
בסןטוןר	28° 20°	9	Cor beetle	

(USFAWS IEV. 4/96)

PATTERSON RANCH BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS





PATTERSON RANCH BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

Prepared by:

H. T. HARVEY & ASSOCIATES

Patrick Boursier, Ph.D., Principal Scott Terrill, Ph.D., Senior Wildlife Biologist David Plumpton, Ph.D., Project Manager Brian Cleary, M.S., Plant Ecologist Dave Johnston, Ph.D., Wildlife Biologist

Prepared for

Mr. Richard Frisbie The Frisbie Planning Company 109 Baldwin Avenue San Mateo, CA 94401

ecember 4, 2001 (revised 2 April 2004)

Project No 657-08

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I. INTRODUCTION

Patterson Ranch is located in west-central California within the boundaries of the City of Fremont, Alameda County, California (Figure 1). General wildlife and botanical surveys were conducted on the property during the summer and winter of 2000. Species-specific surveys for a variety of wildlife species were conducted on site from May through July of 2001, and surveys to map biotic habitats were conducted during October 2001. Additional surveys were conducted for the California tiger salamander from December 2002 through April 2003. Condor Country Consulting (2003) conducted wet season surveys for special-status branchiopods, and soil samples were analyzed for cysts of these species (Helm Biological Consulting 2004). The purpose of these surveys was to document biotic resources that may potentially pose constraints to development and to provide information on the biological resources associated with the site. Specifically, surveys were conducted to describe biotic habitats and to determine whether the site supports special-status species and/or their habitat.

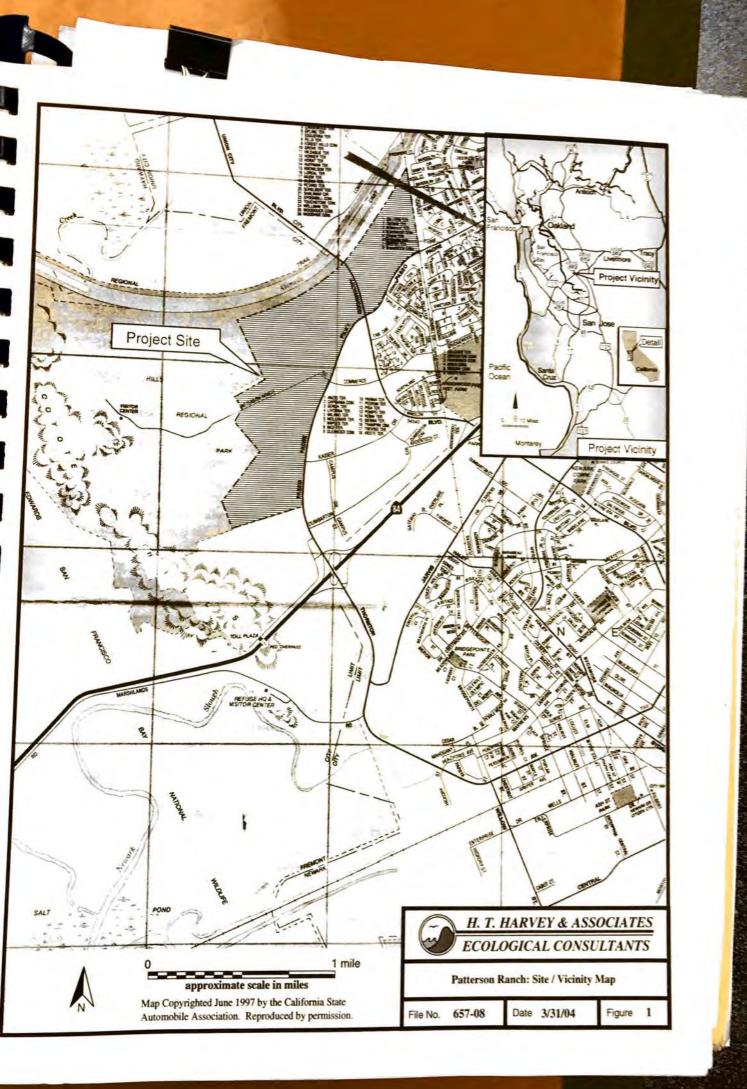
A. GENERAL AREA DESCRIPTION

The 427-acre study area is located immediately west of Paseo Padre Parkway and south of the flood control channels (Alameda Creek and the parallel "K" Line) maintained by the Alameda County Flood Control and Water Conservation District (ACFCWCD). Property owned by Cargill abuts the southern boundary and a residential neighborhood occurs along the eastern boundary separated by a railroad from the study area. The East Bay Regional Park District (EBRPD) owns the land adjacent to the site on the west side, north of Patterson Ranch Road. South of that road on the west side of the site is land owned by the ACFCWCD, but managed as open space by EBRPD.

Elevation does not vary significantly across the site and averages approximately 10 feet National Geodetic Vertical Datum. The topography of the site slopes gently to the west and northwest. The average annual precipitation for the adjacent city of Newark is approximately 13.64 inches per year (Soil Conservation Service [SCS] 1981).

A flood control channel ("P-line") bisects the southern portion of the site. Patterson Slough follows a meandering course in a northwesterly direction across the central portion of the site, which used to flow into Alameda Creek before the EBRPD built the "Dust Marsh" that dammed up the natural flow from Patterson Slough. The "K-line," another flood control channel (also known as Crandall Creek), is on the northern perimeter of the site and crosses the eastern portion of the property. The EBRPD owns a 100-foot wide strip of land between the site and the "K-line" on the west side of Ardenwood Boulevard. A public trail is in that strip of land.

Patterson Ranch has been maintained in agricultural production for more than fifty years. During this period the entire site, except for creek and slough, has been intensively farmed with the soil planted and tilled one or more times every year, reducing use of the site by many species of wildlife.



II. BIOTIC HABITATS

The following section is provided as background information in order to facilitate a discussion of existing biotic resources on site and to describe special-status species habitats that may occur.

The site supports three biotic habitats including agricultural fields, mixed riparian and aquatic freshwater emergent habitat. Roads and the farm machinery storage yard comprise developed areas on site (Figure 2). Where appropriate, the communities have been named based on Holland's system of classification (1986) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Habitats on site were mapped with the aid of aerial photographs.

A. AGRICULTURAL FIELDS

1. Vegetation

Agricultural fields habitat occupies the vast majority of the study area (Figure 2). These fields and surrounding agricultural access roads comprise recently disked areas characterized by bare, disturbed soils that currently support little vegetation. Agricultural fields on the property are managed to produce corn (Zea mays), alfalfa (Medicago sativa), and gladiolas (Gladiola spp.). Portions of the site have been grazed in the past. Numerous, scattered patches of ruderal vegetation too small to map occur around the margins of agricultural fields throughout the study area. The majority of the ruderal vegetation on the property consists of disturbance-oriented, non-native, herbaceous species. These include Harding grass (Phalaris aquatica), Italian wild rye (Lolium multiflorum), rabbitsfoot grass (Polypogon monspeliensis), curly dock (Rumex crispis), prickly ox-tongue (Picris echioides), wild lettuce (Lactuca serriola), field mustard (Brassica rapa), wild oats (Avena fatua), and wild radish (Raphanus sativus).

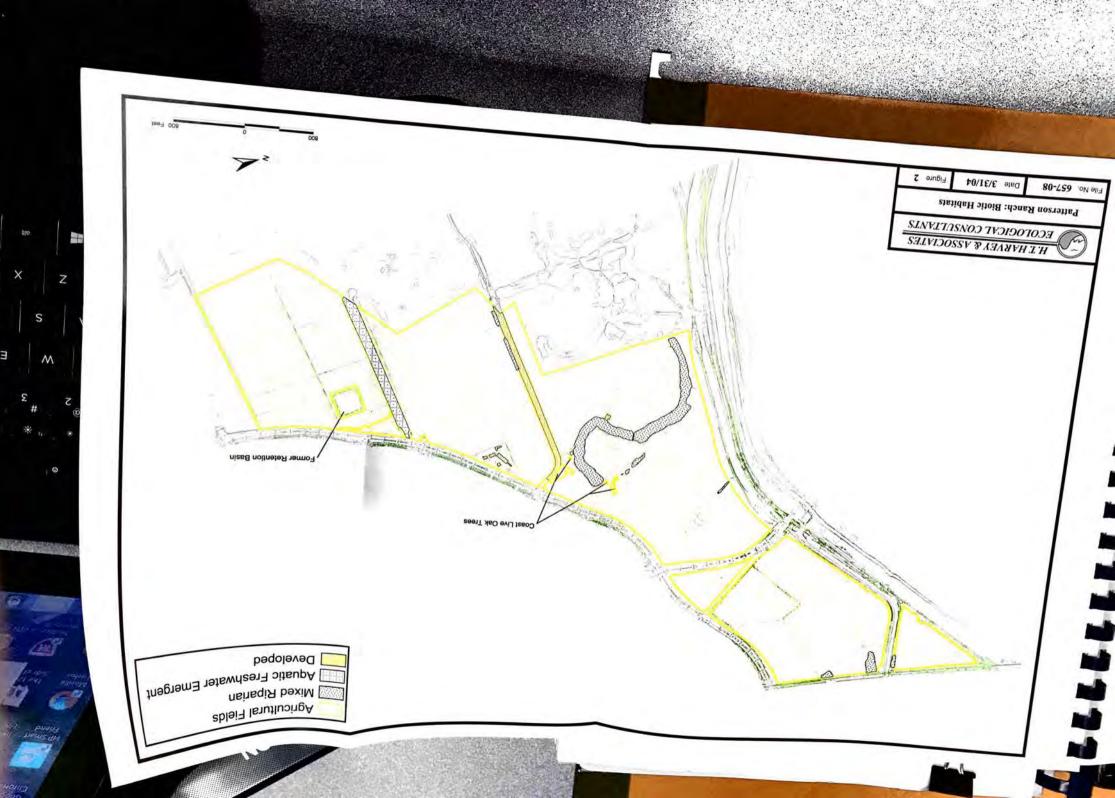
Several features occur within these agricultural fields, but have not been mapped as separate habitats. Several large coast live oaks (*Quercus agrifolia*) are found near the intersection of Patterson Ranch Road and Paseo Padre Parkway, but with a disked understory, they do not constitute a separate habitat type. Similarly, a former detention basin in the southern portion of the site was mapped as disked agricultural land, as it is no longer used for water retention. This feature was removed in the winter of 2003-04.

2. Wildlife

Virtually the entire site is planted each year as it has been since at least the 1950's. These disked fields offer little in the way of wildlife habitat, as both food and shelter are either scarce or absent from these areas. Mourning doves (Zenaida macroura), Rock doves (Columba livia), Brewer's Blackbird (Euphagus cyanocephalus), and Cliff Swallows (Petrochelidon pyrrhonota) were all observed flocking in these areas to forage on invertebrates that have been turned over by disking. The Loggerhead Shrike (Lanius ludovicianus) and American Kestrel (Falco sparverius), as well as Turkey Vultures (Cathartes aura) were all observed foraging in this habitat type.

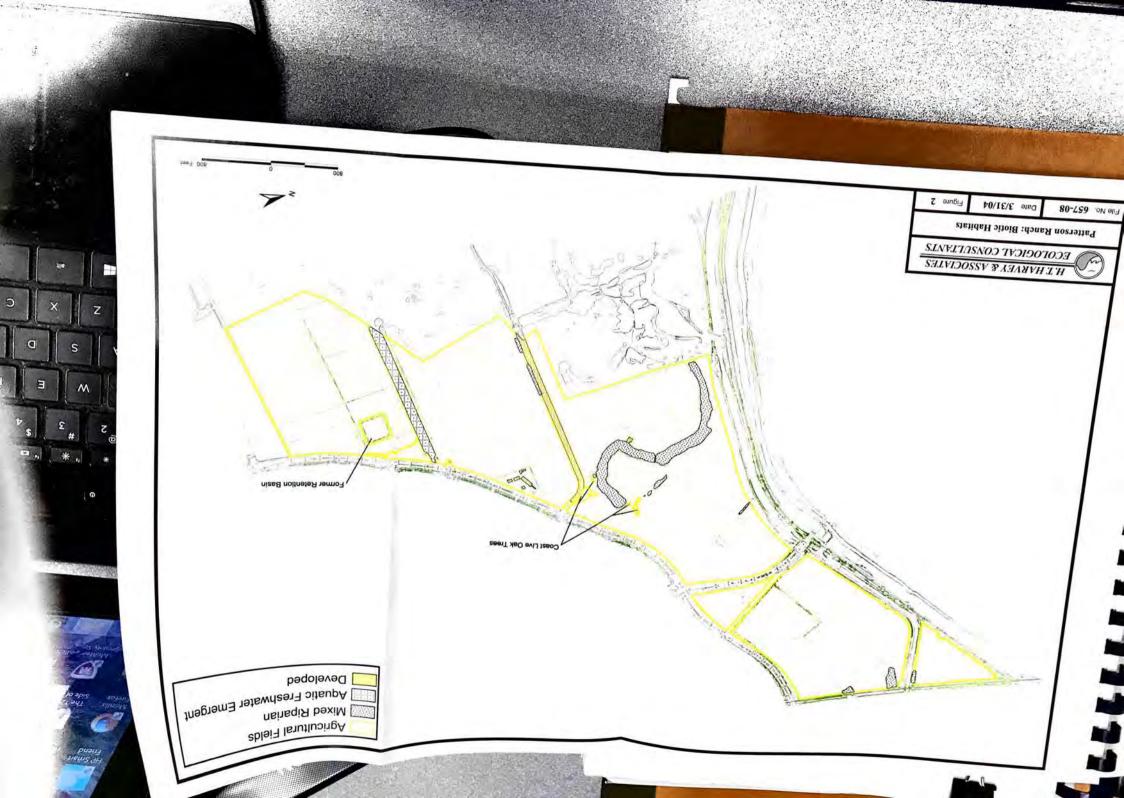
Patterson Ranch Biological Opportunities and Constraints Analysis 3

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Upon occasion in the past, these fields have been fallowed, although for only a single planting season. When fallow, the fields on site are overgrown with dense vegetation that covers most of the ground surface. These fields can offer good habitat to wildlife, particularly small mammals that can live under the vegetation and therefore be protected from predation. The California ground squirrel (*Spermophilus beecheyi*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*) all may use this dense cover for shelter and nesting. Gopher snakes (*Pituophis melanoleucus*) make use of mammal burrows for shelter and reproduction. Bird species are somewhat limited but include the American Goldfinch (*Carduelis tristis*), Song Sparrow (*Melospiza melodia*), and various birds that are associated with the adjacent remnant riparian corridor. The insects and small mammals that inhabit these areas make them excellent foraging habitat for Red-tailed Hawks (*Buteo jamaicensis*), White-tailed Kites, and other birds of prey.

The fields offer foraging opportunities for a number of bird and mammal species. California ground squirrels are abundant in these areas, and western fence lizards (*Sceloporus occidentalis*) make use of their burrows for shelter. Bird species include those listed for disked fields, in addition to Killdeer (*Charadrius vociferous*), Great Egrets (*Casmerodius albus*), and Red-winged Blackbirds (*Agelaius phoeniceus*).

The riparian vegetation associated with Patterson Slough (Figure 2) allows riparian associated wildlife species access to adjacent agricultural fields. During wetter periods, Pacific tree frogs (*Hyla regilla*), western toads (*Bufo boreas*), and garter snakes (*Thannophis* spp.) may forage here. Great Blue Herons (*Ardea herodias*), Great Egrets, Snowy Egrets (*Egretta thula*), and raccoons (*Procyon lotor*) also forage at the edge of this habitat. Once the area dries out, blackbirds and other species foraging over the agricultural fields will move into this area as well.

B. MIXED RIPARIAN

1. Vegetation

Mixed riparian habitat occurs along the opposing banks of Patterson Slough, and directly adjacent to Patterson Ranch Road in the central portion of the property (Figure 2). The mixed riparian habitat adjacent to Patterson Ranch Road is supported largely by seasonal hydrology, and is associated with a ditch that lines the south side of the road. Two patches of remnant riparian habitat also occur in the northern portion of the study area. These riparian patches occur within two isolated, shallow depressions that do not support ponded water during the year including the winter rainfall period.

The multi-layered tree canopy includes an overstory dominated by western sycamore (*Platanus racemosa*), arroyo willow (*Salix lasiolepis*), and coast live oak (*Quercus agrifolia*). Understory shrubs include blackberry (*Rubus sp.*), American dogwood (*Cornus sericea ssp. sericea*), and poison oak (*Toxicodendron diversilobum*). Broad-leaved cattail and bur reed also occur within portions of this habitat type. The two patches of remnant riparian habitat in the northern portion of the property are dominated by arroyo willow.

2. Wildlife

The riparian forests along Patterson Slough and adjacent areas that have dense willows and oaks provide important habitat that has largely disappeared from the lower Alameda Creek areas. Willow thickets provide foraging habitat for many species of migrant songbirds and breeding habitat for several species including the Salt Marsh Common Yellowthroat (*Geothlypis trichos sinuosa*) a California species of special concern. In addition, the riparian habitats of Coyote Hills and nearby areas are fairly isolated from other areas of favorable habitat and migrant birds flying over the bay and general region are especially attracted to them. Thus, these areas represent high-value habitats for neo-tropical migrants. Pacific tree frogs and western toads breed in the channel, and garter snakes forage on these species. Red-shouldered Hawks (*Buteo lineatus*) forage along this riparian habitat for many of the smaller vertebrates associated with this habitat. Small mammals that occur here include deer mice in the willow thicket, and in association with the wet emergent vegetation, California vole. Several medium-sized mammals (*e.g.*, striped skunk (*Mephitis mephitis*), raccoon, and gray fox) also find cover and forage here. Great Blue Herons, Black-crowned Night Herons in the coast live oak trees.

C. AQUATIC/FRESHWATER EMERGENT

1. Vegetation

Aquatic/freshwater emergent habitat occurs primarily within the P-line channel and within portions of Patterson Slough (Figure 2). The deep-water flow of the P-line supports vegetation primarily along the margins of the channel. Species observed include broad-leaved cattail and acute bulrush (*Scirpus acutus* var. *occidentalis*). Aquatic/freshwater emergent species observed within portions of Patterson Creek include broad-leaved cattail, acute bulrush, and mosquito ferm (*Azolla filiculoides*). Portions of the agricultural drainage ditches in the western central and southwest areas on site also support patches of aquatic/freshwater emergent vegetation.

2. Wildlife

Many of the species occurring in the emergent vegetation of the riparian areas also occur in this habitat. Common birds found in the freshwater emergent vegetation include the Song Sparrow, Red-winged Blackbird and the Marsh Wren. Cattails and bulrushes provide important cover for many wildlife species associated with fresh water marshes and open water. In addition, many waterfowl, such as the Pied-billed Grebe (*Podilymbus podiceps*), Cinnamon Teal (*Anas cyanoptera*), American Coot (*Fulica Americana*), Northern Shoveler (*Anas clypeata*), and Canada Geese (*Branta canadensis*) occur in the open water found in this habitat.

D. DEVELOPED

Developed area occupies approximately 4.5 acres of the site and includes the agricultural structures and the farm labor camp buildings in the southern and central portions of the site, respectively (Figure 2). Developed areas are devoid of vegetation.

1. Wildlife

The wildlife most often associated with developed areas are those that are most tolerant of periodic human disturbances, including several introduced species such as European Starlings (*Sturnus vulgaris*), Rock Doves, house mice (*Mus musculus*), and Norway rats. Norway rats typically burrow under structures near water. Native species that are able to utilize these habitats include western fence lizards, American Robins (*Turdus migratorius*), Brewer's Blackbirds, Northern Mockingbirds (*Mimus polyglottos*), Mourning Doves, House Finches, California ground squirrels, black-tailed hares, and striped skunks. Barn Owls (*Tyto alba*) may roost and breed in the agricultural buildings, foraging over adjacent habitats. Likewise, some bats that forage throughout the study area, such as Mexican free-tailed bat, Yuma bat, pallid bat, and big brown bat (*Eptesicus fuscus*), may make use of small cavities associated with structure eves, although no specific bat roosts were observed on-site.

III. SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

Information concerning threatened, endangered or other special-status species that may occur in the area was collected from several sources and reviewed by H. T. Harvey & Associates' biologists. These sources included in-house sensitive species maps of the county, the CDFG's Natural Diversity Data Base (CNDDB; 2000), the *California Native Plant Society's* [CNPS] *Inventory of Rare and Endangered Vascular Plants of California* (2001), *The Jepson Manual* (Hickman 1993), *Manual of the Grasses of the United States* (Hitchcock 1971), and miscellaneous information available through the USFWS, CDFG, technical publications, and consultation with an East Bay Regional Parks District botanist (Brad Olson, pers. comm.).

A search of published accounts of special-status species in the vicinity was conducted using the California Natural Diversity Data Base Rarefind (2000). Included in the search were the United States Geological Survey (USGS) Quadrangle Maps for Newark, California in which the site occurs, as well as the eight surrounding quadrangles: Dublin, Hayward, Milpitas, Mountain View, Niles, Palo Alto, Redwood Point and San Leandro. All species listed as occurring in Alameda County and occurring on CNPS Lists 1A, 1B, 2, 3, or 4 were reviewed. An overview of special-status species regulations is provided in Appendix A.

A. SPECIAL-STATUS PLANT SPECIES

Field surveys were conducted during the summer and fall of 2000, and the spring and summer of 2001, for habitats capable of supporting special-status plants on site. The surveys involved hiking the entire study area to observe all habitats on site. Additional field surveys were conducted during on-going wetland field monitoring in the winter and spring of 2001, 2002, 2003 and 2004.

Many of the special-status plant species occurring in the vicinity of the property are found only in habitat types that are not present in the study area. Specifically the following habitat types that could support special status plants but are absent from the site include: broadleaved upland forests, chaparral, lower montane coniferous forest, alkali playa, coastal prairie, coastal bluff scrub, coastal dunes, serpentine soils, north coast coniferous forest, closed-cone coniferous forest, meadows, and coastal salt marsh. Thus, species that occur in the region, but which do not occur in habitats or microhabitats present on site were not included or discussed below. These species include San Mateo thorn-mint (Acanthomintha duttonii), robust spineflower (Chorizanthe robusta var. robusta), Palo Alto thistle (Cirsium praeteriens), Point Reyes bird'sbeak (Cordylanthus maritimus ssp. palustris), Diablo helianthella (Helianthella castanea), bigscale balsamroot (Balsamorhiza macrolepis var. macrolepis), fragrant fritillary (Fritillaria liliacea), Marin western flax (Hesperolinon congestum), Kellogg's horkelia (Horkelia cuneata ssp. sericea), slender-leaved pondweed (Potamogeton filiformis), and most beautiful jewelflower (Steptanthus albidus ssp. peramoenus). Descriptions follow for only those species for which potential habitat occurs, or regarding which the resource agencies have expressed particular concern.

NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Federal or State Endangered Species	red Species		
Contra Costa goldfields (Lasthenia conjugens)	FE, CNPS IB	Cismontane woodland, vernal pools, mesic valley and foothill grassland.	Potential habitat exists on site. Species determined to be absent.
California seablite (Suaeda californica)	FE, CNPS 1B	Coastal salt marshes and swamps	Potential habitat exists on site. Species determined to be absent.
Vernal Pool Tadpole Shrimp (Lepidurus packardi)	毘	Vernal pools and swales containing clear to highly turbid water.	Marginal habitat occurs on the sites with appropriate soils. Recent records occur about 7 mi south of the site. Protocol-level field surveys conducted in 2003 . Species determined to be absent.
California Red-legged Frog (Rana aurora dratonii)	FT, SP, CSSC	Streams, freshwater pools and ponds with overhanging vegetation	Potential habitat on site, no hydrological connection to known populations, but the site provides a large area with potential breeding habitat. Protocol-level surveys conducted in 2000 had negative results. Presumed absent.
Bald Eagle (Haliaeetus leucocephalus)	FB, SE, SP	Occurs mainly along sea coasts, rivers and lakes; nests in tall trees or in cliffs. Feeds mostly on fish.	Rare winter visitor.
American Peregrine Falcon (Falco peregrinus anatum)	FE,SE,SP	Forages in many habitats; requires cliffs for nesting.	Occasional forager on site; no suitable breeding habitat on site.
California Clapper Rail (Rallus longirostris obsoletus)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass.	Recorded in adjacent salt marsh habitats, but no habitat on site. No recent records on site, and not expected to breed here. Presumed absent.
California Least Tern (Sterna antillarum brownii)	FE, SE	Nests along the coast on bare or sparsely vegetated, flat substrates.	Breeds along the Bay Shore at Alameda. Post-breeding foragers occur elsewhere along the bay and the salt ponds not likely on the site.
Willow Flycatcher (Empidonax traillii)	FE (extimus) SE (brewsteri)	Breeds locally in riparian habitats in mountains and southern deserts.	Uncommon migrant; those occurring on site are probably not of the listed races.
Salt Marsh Harvest Mouse (Reithrodontomys raviventris)	FE, SE	Pickleweed in saline emergent wetlands.	Records for this species occur in the area (one record about 6.5 miles to the south), but habitat for this species does not occur on the site. Salt marsh habitat, with dense stands of pickleweed, occurs in areas immediately south of the site, but this habitat is isolated from the site by a road and levee. <u>Presumed absent</u> .
Federal or State Threatened Species	ned Species		
Western Snowy Plover (Charadrius alexandrinus nivosus)	FT, CSSC	Sandy beaches on marine and estuarine shores.	No suitable breeding or foraging habitat on site; May occur rarely in adjacent areas but not expected to breed there. Presumed absent.
Federal or State Proposed Endangered or Threatened Species	Endangered or	· Threatened Species	
California Tiger Salamander (Ambystoma californiense)	FC, CSSC	Vernal or temporary pools in annual grasslands, or open stages of woodlands.	Marginal but potential breeding habitat occurs on the site and a recent (1995) record for this species occurs about 6.5 mi. south of the site. Enhanced-level of field surveys conducted in 2002-03. Species determined to be absent
California Species of Special	cial Concern		
Western Pond Turtle (Clemmys marmorata)	ST	Permanent or nearly permanent water in a variety of habitats.	Potential foraging, basking, and breeding habitat on the site. Not observed during surveys.
American White Pelican (Pelecanus erythrorhynchos)	CSSC	Forages on fish found in freshwater lakes and rivers and breeds up to 150 miles from feeding	Observed foraging immediately adjacent to the site, and expected to forage on the site. No breeding habitat on or near the site.

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Table 1. Special-status Plant and Animal Species. Their Status, and Potential Occurrence on the Patterson Ranch Site,

Fremont, California.			
NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Double-crested Cormorant Phalachorcorax auritus)	CSSC	Colonial nester on coastal cliffs, offshore islands, electrical transmission towers, and along interior lake margins. Feeds on fish.	Observed flying over the site but no breeding habitat on the site, and only marginal foraging habitat on the site.
White-faced Ibis (Plegadis chihi)	CSSC	Forages in freshwater marshes, and to a lesser extent, brackish areas.	Occasional visitor to region in fall and winter. Potential foraging habitat on the site.
Long-billed Curlew (Numenius americanus)	CSSC	Nests in both dry and wet uplands; occurs on beaches along coast and inland lakes, salt marshes and grain fields.	No breeding habitat but expected to forage on the site.
Califomia Gull (Larus californicus)	CSSC	Common during fall, winter, and spring; occasionally during summer.	May occur on-site throughout the year. Not expected to breed on the site.
Cooper's Hawk (Accipiter cooperii)	CSSC	Uses many habitats in winter and migration.	Observed foraging on the site and potential breeding habitat occurs in dense woodland on the site.
Merlin (Falco columbarius)	cssc	Uses many habitats in winter and migration.	Occasional forager during migration and winter.
Prairie Falcon (Falco mexicanus)	cssc	Forages on birds and small mammals in dry, open grasslands.	May occur on site primarily as a winter visitor; but also rarely in summer.
Northern Harrier (Circus cyaneus)	CSSC	Forages in open to herbaceous stages of many habitats.	Forages on site and potential breeding habitat on site.
Golden Eagle (Aquila chrysaetos)	cssc	Breeds on cliffs or in large trees or structures.	May rarely fly over the site; no breeding habitat on site.
Burrowing Owl (Atheve cunicularia)	CSSC	Flat open grasslands.	No owls observed on the site but potential breeding habitat occurs on the site. Historically owls have been present on the site. Enhanced-level surveys conducted in 2000 and 2001. Presumed absent.
Short-eared Owl (Asio flammeus)	CSSC	Requires tall emergent vegetation or grasses for mating.	May occur during migration and winter.
Loggerhead Shrike (Lanius ludovicianus)	cssc	Breeds in brushy, open areas.	Forages and possibly breeds on the site.
Saltmarsh Common Yellowthroat (Geothlypis trichas sinuosa)	CSSC	Fresh and salt water marshes; thick foraging cover; breeds in tall grass, tules, and willows.	Potential breeding habitat on the site. Observed on site.
Alameda Song Sparrow (Melospiza melodia pusillula)	cssc	Breeds primarily in tidal wetlands.	Song Sparrows observed on the site and breeding habitat on-site. However, this race is primarily restricted to tidal habitats. Observed on site.
Tricolored Blackbird (Agelaius tricolor)	CSSC	Breeds near fresh water in dense emergent vegetation.	Potential breeding habitat on the site. Observed on site. Breeds in Coyote Hills wetlands.
Salt Marsh Wandering Shrew (Sorex vagrans halicoetes)	CSSC	Medium high marsh 6-8 feet above sea level with abundant driftwood and pickleweed.	No records for the area and considered rare. Marginal habitat on site, assumed absent.
Townsend's Big-eared Bat (Corynorhinus townsendii)	CSSC	Roosts in caves and mine tunnels in a variety of habitats.	No records for the area and no maternity roosting habitat on site. Presumed absent.
California Mastiff Bat (Eumops perotis californicus)	CSSC	Forages over many habitats; requires tall cliffs or buildings for roosting sites.	No records for the area and no roosting habitat on site. Presumed absent.
Pallid Bat (Antrozous pallidus)	CSSC	Forages over many habitats; roosts in buildings, rocky outcrops and rocky crevices in mines and caves.	Potential forager on site, but surveys did not detect any roost sites.

NAME	*STATUS HABITAT	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
State Protected Species or CNPS Species	CNPS Species		
Alkali milk-vetch (Astragalus tener var. tener)	CNPS IB	Alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grassland.	Alkaline soils in playas, vernal pools, and adobe Potential habitat exists on site. Species determined to be absent. clay areas in valley and foothill grassland.
Congdon's tarplant (Centromadia parryi ssp. congdonii)	CNPS 1B	Alkaline soils; valley and foothill grassland, chenopod scrub, alkali meadows and flats.	Potential habitat exists on site. Species determined to be absent
Western leatherwood (Dirca occidentalis)	CNPS 1B	On moist slopes in partial shade in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, northcoast forest, riparian forest and riparian woodland	Marginal habitat on site. Species determined to be absent
Hairless popcorn-flower (Plagiobothrys glaber)	CNPS 1A	Alkaline soils; meadows, marshes and swamps	Potential habitat exists on site. Species determined to be absent
White-tailed Kite (Elanus caeruleus)	SP	Forages in open areas of many habitats.	Resident, breeds on the site.
Ringtail (Bassariscus astutus)	SP	Found in a variety of woodland types, often near water.	Marginal habitat on the site. Not known to be present along lower Alameda Creek: presumed absent.

*SPECIAL STATUS SPECIES CODE DESIGNATIONS

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- Federally listed Threatened
- State listed Threatened FT = ST =
- Federally proposed Endangered FPE =
- FC=
- Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened California Species of Special Concern CSSC =

 - State Protected Species SP=
- Plants presumed extinct in California CNPS IA =

Plants rare, threatened, or endangered in California and elsewhere CNPS IB =

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1. Federal or State Endangered or Threatened Species

Contra Costa Goldfields (Lasthenia conjugens). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B. This annual herb occurs in mesic areas in cismontane woodlands, alkaline playas, valley and foothill grasslands, and vernal pools. The blooming period is from March to June. This range of this species is reported to have been reduced to Alameda, Contra Costa, Monterey, Napa and Solano counties, having been extirpated from three other counties forming its historic range, including Santa Clara County (CNPS 2001). However, the CDFG Rarefind Database reports two large populations within the Milpitas quadrangle, one about 0.4 miles west of I-880, near Sky Sailing airport, and the second in the San Francisco National Wildlife Refuge, both in Alameda County near the site. Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the goldfields. Plants were not observed during on-going field studies and this species is considered absent.

California Seablite (Suaeda californica). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B. This evergreen shrub occurs in coastal salt marshes and swamps. The blooming period extends from July to October. The California Natural Diversity Database has two records within the quadrangle search area, a historical occurrence on Bay Farm Island, Alameda County, which is now believed extirpated, and an occurrence in the salt flats at the Palo Alto Yacht Harbor, the status of which is unknown. The seasonal wetland and aquatic/freshwater emergent areas of the site at one time may have provided suitable habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the California seablite. Plants were not observed during ongoing field studies and this species is considered absent.

2. CNPS Listed Species

Alkali Milk-vetch (Astragalus tener var. tener). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. This annual herb occurs in alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grasslands. The blooming period extends from March to June. The range of this species currently includes Alameda, Merced, Solano, and Yolo counties, and has been extirpated from ten others including Contra Costa County. However, the CDFG Rarefind Database has a single recent occurrence within the quadrangle search area in the Milpitas quadrangle, in Alameda County, in the Pacific Commons Preserve (CNDDB 2000). Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the alkali milk vetch. Plants were not observed during ongoing field studies and this species is considered absent.

Congdon's Tarplant (Centromadia parryi ssp. congdonii). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. Congdon's tarplant occurs in valley and foothill grassland, on alkaline soils. The flowering period for this species occurs from June through November. This species has been nearly extirpated from the Bay Area; extant populations are known from Monterey and San Luis Obispo Counties, and possibly Santa Clara County (CNPS 2001). The CDFG Rarefind Database has several records from as recently as 1998 within the quadrangle search area. The records are: three in the Milpitas quadrangle, one west of the Nimitz Freeway near Cushing Parkway, another in Sunnyvale Baylands Park, and a final occurrence in Alviso; two in the Dublin quadrangle, one in the Camp Parks Reserve Forces Training Area and the other in San Ramon Valley; one in the Niles quadrangle near the junction of Fremont Boulevard and Auto Mall Parkway; and finally an occurrence in the Mountain View quadrangle, near the mouth of Stevens Creek. The agricultural areas including the ruderal margins of these areas on site may provide suitable habitat, and the soils of the site are all alkaline. <u>Plants were not observed during on-going field studies and this species is considered absent.</u>

Western Leatherwood (*Dirca occidentalis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. Western leatherwood is found on moist slopes in partial shade in a variety of habitats. These habitats include broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland. This deciduous shrub flowers from January through April. Western leatherwood is known from Alameda, Contra Costa, Marin, Santa Clara, San Mateo, and Sonoma counties (CNPS 2001). The CDFG Rarefind Database reports only three occurrences of western leatherwood within the quadrangle search area; these are located in Mountain View and Palo Alto. Although the riparian area may provide marginal habitat for this species, the small, fragmented, and somewhat open canopy nature of the habitat makes it unlikely that this species will occur. This species is considered absent.

Hairless Popcorn-flower (*Plagiobothrys glaber*). Federal Listing Status: None; State Listing Status: None; CNPS List 1A. This annual forb occurs in wet, alkaline soils of meadows and coastal salt marshes and swamps. The blooming period ranges from March to May. Most occurrences have been reported from the southern shore of San Francisco Bay and alkaline flats in the southern Santa Clara Valley, but it has also been reported to occur in the Altamont quad (CNDDB 2000). Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the hairless popcorn flower. Plants were not observed during on-going field studies and this species is considered absent.

B. SPECIAL-STATUS ANIMAL SPECIES

Wildlife surveys were conducted at the site during the mid- to late summer of 2000 and during spring and summer of 2001. Surveys for <u>Burrowing Owls</u>, other raptors, and other wildlife were conducted on July 19, 21, 26, and August 9, 2000. Other special-status wildlife surveys were conducted on August 2, 25, 31, and September 7, 2000. Surveys for amphibians and reptiles, including the <u>red-legged frog</u> were done on August 2, 12, 13, 14, 15, 18, 21, 27, 28, 31, and September 1, 4, 7, and 14, 2000. They concentrated on the areas of watercourses, including Patterson Slough, the Alameda Creek flood control channel, the "P" line and the "K"-line (both flood control channels. The special-status animal species that occur in the vicinity of the site in habitats similar to those found on the site are described below.

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Surveys for <u>Burrowing Owls</u> and other nesting raptors (potentially including Red-tailed Hawks, White-tailed Kites, and other locally-occurring species) were conducted on 7, 12, 14, 15, and 19 June; 10 July; and 13 and 15 August 2001, in addition to work completed in 2000. Surveys were conducted by walking transects and visually inspecting the entire site for potential nesting habitat. When potential habitat was encountered, area searches were conducted for nesting birds, nest structures, or secondary evidence indicating the presence of these species.

Additionally, this report includes an overview of the results of surveys conducted by our firm for the <u>California tiger salamander</u> in the winter of 2003-03 (Appendix B). Condor Country Consulting (2003; Appendix C) conducted wet season surveys for special-status branchiopods in the winter and spring of 2002-03. Soils taken during those surveys were analyzed for branchiopod cysts by Helm Biological Consulting (2004; Appendix D).

1. Federal or State Endangered or Threatened Species

Vernal Pool Tadpole Shrimp (Lepidurus packardi). Federal Listing Status: Endangered; State Listing Status: None. Vernal pool tadpole shrimp occur primarily in the Central Valley and range from east of Redding in Shasta County south to the San Luis National Wildlife Refuge in Merced County (59 FR 48136). Outside of the Central Valley, a single population of the vernal pool tadpole shrimp occurs about 6.5 miles to the south of the site in the Warm Springs Seasonal Wetland in Fremont, Alameda County (Caires et al. 1993). They have also been found on the Catellus site. Tadpole shrimp eat microscopic organisms, detritus, dead tadpoles, earthworms, frog eggs and mollusks. Females deposit eggs on vegetation on the pool bottom. Pools containing vernal pool tadpole shrimp have clear to highly turbid water and range in size from less than an acre to 90 acres. These pools may be highly turbid and mud-bottomed or grass-bottomed in old alluvial soils underlain by hardpan. Pools generally have low conductivity, low total dissolved solids and low alkalinity (Eng et al. 1990). Tadpole shrimps are demersal (i.e., they are generally benthic, but are capable of swimming), and they also burrow in soft sediments. The periodic flooding that allowed vernal pool species to disperse became rare as people built dams, drainage canals and other barriers. However, vernal pool tadpole shrimp eggs can pass through bird digestive tracts intact and may be dispersed by birds.

There are no records of tadpole shrimp on the site. Habitat on site is marginal, and there are no areas that have the typical hummock topography of vernal pools. However, there are areas on site that pond seasonally, and the underlying soil composition is consistent with those soils supporting vernal pool tadpole shrimp on the Warm Springs Seasonal Wetland to the south (Pat Boursier, pers. obs.). Based on habitat assessment, the species is very unlikely to occur, as the species requires 3-4 weeks of ponding to develop to maturity. However, it has been found in ditches and other unlikely locations at the Catellus site in Fremont. <u>Surveys for this species conducted during 2002-03 proved negative</u> (Condor Country Consulting 2003).

California Red-legged Frog (*Rana aurora draytonii*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern. The USFWS listed the California red-legged frog as federally threatened on May 23, 1996. The red-legged frog is a medium-sized frog with reddish legs. This species is generally restricted to riparian habitats in California and northern Baja California. Red-legged frogs prefer deep, quiet pools (greater than 3 feet deep) in creeks, rivers, or lakes below 1,000 meters in elevation (about 3,000 feet). Habitat requirements include fresh emergent or dense riparian vegetation, especially willows adjacent to shorelines. Red-legged frogs can survive in seasonal bodies of water that are dry for short periods if there is a permanent water body or dense vegetation stands nearby.

The adults are normally active at night and breed in ponds and creeks, or in marshes, during the late winter, or early spring, after waters recede. Females attach eggs in a single cluster to a vegetation brace just under the surface of the water. The eggs hatch in just over a week and the resulting larvae feed on plant and animal material on the bottom of the pond. It takes at least four months for the larvae to metamorphose into juvenile frogs.

On February 18, 1997 the USFWS released protocols for assessing presence or absence of the California red-legged frog on site. Appropriate site assessments include an analysis of all known sightings within a five-mile radius, and a description of the habitats both within the site and within one mile from the boundary of the site. The site assessment also includes a description of the upland and aquatic habitats of the site. Any subsequent surveys are generally conducted between May 1 and November 1. All aquatic habitats (*i.e.*, suitable habitat) would be surveyed on four separate occasions (two diurnal and two nocturnal surveys). Diurnal surveys should be conducted on clear, sunny days and nocturnal surveys should be conducted on warm, still nights between one hour after sunset and 12 midnight.

California red-legged frogs have been observed in a number of aquatic and terrestrial habitats throughout their historic range. The key to the presence of red-legged frogs in these habitats is the presence of perennial (or near perennial) water and the general lack of introduced aquatic predators. These predators include centrarchid fishes (*e.g.*, largemouth bass [*Micropterus salmoides*], green sunfish [*Lepomis cyanellus*], and bluegill [*L. macrochirus*]), crayfish (*Pacifastacus leniusculus* and *Procambarus clarkii*), and bullfrogs (*Rana catesbeiana*).

The site is located near Alameda Creek, a watershed that supports California red-legged frogs. However, according to the CNDDB (2000) and other records, there are relatively few records, and no recent records, from low-lying bayside areas of Alameda County where this property is located.

On September 11, 2000, the USFWS (65 Federal Register § 54892) proposed critical habitat for the California red-legged frog. The closest designated critical habitat lies east of the site, along the Walpert Ridge in Unit 15, the East Bay-Diablo Range Unit. Although habitat on the property appears suitable for this species, no red-legged frogs were detected during protocol-level surveys in 2000. Furthermore, it is unlikely that a frog could be washed down from the upper watershed because of existing structure barriers between the known populations and the site. Therefore this species is presumed absent from the property.

California Clapper Rail (Rallus longirostris obsoletus). Federal Listing Status: Endangered; State Listing Status: Endangered. The California Clapper Rail is a locally common permanent resident of coastal salt and brackish marshes around San Francisco Bay and Monterey Bay. Most of the population exists at San Francisco Bay, but this subspecies may also still occur at Morro and Humboldt bays (Wilbur and Tomlinson 1976). Since the mid-1800s,

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about 80% of San Francisco Bay's marshlands have been eliminated through filling, diking, or conversion to salt evaporation ponds. As a result, the California Clapper Rail lost most of its former habitat, the population declined severely, and the species was listed as endangered.

Clapper Rails along the Pacific Coast prefer salt marshes and brackish marshes dominated by cordgrass (*Spartina foliosa*) and marsh gumplant (*Grindelia stricta*); in brackish marshes they also frequent areas supporting bulrushes. These birds also require shallow areas or mudflats for foraging, particularly channels with overhanging banks and vegetation. As a refuge from extreme high tides and as a supplementary foraging area, rails move to the upper marsh vegetation where it intergrades with peripheral upland vegetation. These birds have no requirement for fresh water.

Marsh habitats on the site do not provide suitable breeding habitat for this species, and the aquatic emergent vegetation is likely too far from areas with appropriate habitat for this species to occur on the site as an occasional visitor. <u>Therefore, there is no on-site habitat and the California Clapper Rail is presumed absent from the site</u>.

Salt Marsh Harvest Mouse (Reithrodontomys raviventris). Federal Listing Status: Endangered; State Listing Status: Endangered, Protected. The salt marsh harvest mouse is found only in saline wetlands of San Francisco Bay and its tributaries. The southern subspecies *R. raviventris* is restricted to an area from San Mateo County and Alameda County along both sides of San Francisco Bay south to Santa Clara County. The salt marsh harvest mouse occurs with the closely related, ubiquitous and abundant western harvest mouse (*R. megalotis*) at upper edges of marshes and in marginal areas. Both animals occur in pickleweed, but the salt marsh harvest mouse replaces the western harvest mouse in denser areas of pickleweed. *R. raviventris* has declined substantially in recent decades. This decline is due primarily to diking and filling of marshes, subsidence, and changes in salinity brought about by increasing volumes of fresh water discharge into the bay.

Densely vegetated, tidal, saline marsh dominated by pickleweed is generally considered prime habitat for this species. Moderate populations of salt marsh harvest mouse have also been found in diked marshes. Salt marsh harvest mice may also be found in grassland habitats adjacent to pickleweed marshes, particularly during the spring. These grasslands are generally used by harvest mice only in the spring when new grass growth affords suitable cover and possibly forage. Salt marsh harvest mice may also use adjacent grasslands on a daily basis to avoid high tide events.

Appropriate habitat for this species does not occur on the site. However, pickleweed does occur in dense stands south of the levee road adjacent to the extreme southwest corner of the property. Because no cover occurs on this road, and the grassland is probably over 25 feet from the pickleweed habitat, the salt marsh harvest mouse is not expected to occur in this adjacent grassland, or any other areas of the site.

2. Federal or State Candidate Species

California Tiger Salamander (Ambystoma californiense). Federal Listing Status: Candidate; State Listing Status: Species of Special Concern. On April 18, 1994, the USFWS determined that the proposal to list the tiger salamander as endangered was warranted but precluded due to the pending listing action of higher priority species (Federal Register 59:74). The USFWS is supposed to review this decision annually until such time as the agency determines that the listing is either unwarranted or warranted. The status of the tiger salamander presently remains unchanged.

This species' preferred habitat is temporary (minimum of 3 to 4 months) or permanent water sources (*i.e.*, vernal pool, ephemeral pool, or human-made ponds) surrounded by upland habitats that support small mammal burrows. The ponds provide the breeding and juvenile habitat, while small mammal burrows (*e.g.*, ground squirrel or pocket gopher) in the upland habitats support adult salamanders during the dry season.

Adults often emerge from the burrows at night during the first moderate to heavy winter rains and migrate to vernal pools, seasonal ponds, or human-made ponds, where they lay their eggs. The eggs are attached singly or in clumps to vegetation under or directly on the bottom of the pool if emergent vegetation is lacking. The eggs hatch approximately one week after they are deposited. The larvae prey upon invertebrates and other amphibian larvae for three to six months, during which time they metamorphose into juveniles. Juveniles typically leave the pools in large numbers during a one- to two-week period, usually as the ponds dry. The juveniles then search for available burrows. Juveniles aestivate in these burrows until the following winter.

Tiger salamanders take several years to reach maturity and do not necessarily breed every year, even if sufficient habitat is present. Their range is restricted to the Central Valley and Coast Range of California from Butte County south to Santa Barbara County. They have disappeared from a significant portion of their range due to habitat loss from agriculture and urbanization and the introduction of non-native aquatic predators (e.g. bluegill [Lepomis macrochirus], largemouth bass [Micropterus salmoides], mosquitofish [Gambusia affinis], and bullfrogs [Rana catesbeiana]).

This species occurs approximately 6.5 miles to the south in the Warm Springs Seasonal Wetlands area. Surveys have not been conducted for this species, but the habitat is very marginal. There appear to be no areas on-site that would pond seasonally for the required 3-4 months to complete a breeding cycle. The aquatic habitat associated with Patterson Slough is very unlikely to support breeding CTS, in part because the area supports bullfrogs and probably fish, both of which feed on CTS juveniles. There are several depressions off-site, within the East Bay Regional Park land, that may pond, but probably not for the required length of time to support breeding. Surveys conducted in the winter and spring of 2002-03 proved negative. This species is presumed to be absent from the site.

C. OTHER SPECIES

The following suite of species really does not seriously constrain site development. Either they do not occur, occur in areas that would not be affected by development, or potential impacts are minimal. Most are protected from disturbance during the breeding season, so there may be either the need to conduct preconstruction surveys or phase construction into the non-breeding season.

Northern Harrier (Circus cyaneus). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Northern Harrier is commonly found in open grasslands, agricultural areas and marshes. Nests are built on the ground in areas where long grasses provide cover and protection. Harriers hunt for a variety of prey, including rodents, birds, frogs, reptiles, and insects by flying low and slow in a traversing manner using both sight and sound to detect prey items. Harriers were observed on the site during surveys and potential breeding habitat occurs in the tall herbaceous vegetation alongside Patterson Creek on the site. Future development resulting in impacts to foraging habitat of this species is unlikely to have significant impacts on Northern Harrier populations due to the availability of foraging habitat elsewhere in the region. However, development in marshes, ruderal habitats, grasslands, or other habitats having tall, dense herbaceous vegetation should be preceded by preconstruction surveys for nesting harriers if development is to occur during the breeding season (February through August).

White-tailed Kite (*Elanus caeruleus*). Federal Listing Status: None; State Listing Status: Protected. This species prefers habitats with low ground cover and variable tree growth. Kite nests are built near the tops of oaks, willows, or other dense broad-leafed deciduous trees in partially cleared or cultivated fields, grassy foothills, marsh, riparian, woodland, and savanna. Kites prey primarily on small rodents (especially the California vole), but also feed on birds, insects, reptiles, and amphibians. When prey is abundant these birds may rear two broods in a single breeding season. Once considered endangered, the kite is now fairly common, though fully protected in the State of California.

A pair of White-tailed Kites nested on the site during the 2000 breeding season (Figure 3). Two adult and 3 to 4 juvenile White-tailed Kites were noted proximate to the fields at the high end of Patterson Creek on 7 June 2001. White-tailed Kite adults and the presence of newly fledged juveniles at the site were indicative that they were breeding on the property. An adult and juvenile were observed again on 19 June 2001, a possible nest was detected in a sycamore tree in the area of the "V" formed by the east side of Patterson Creek. To ensure that no White-tailed Kite nests are disturbed during construction activities, preconstruction surveys should be conducted if development is to occur during the breeding season (February through August).

Cooper's Hawk (Accipiter cooperii). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Cooper's Hawk is a medium-sized hawk that preys on a variety of bird species and occasionally takes small mammals and reptiles. Breeding pairs in California usually select nest sites within dense stands of live oak woodland, riparian habitats, or other wooded areas. However, pairs may also nest in sparsely wooded areas and, especially in recent decades, nesting pairs have been found breeding in suburban areas and parks in the San





PATTERSON RANCH BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

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I. INTRODUCTION

Patterson Ranch is located in west-central California within the boundaries of the City of Fremont, Alameda County, California (Figure 1). General wildlife and botanical surveys were conducted on the property during the summer and winter of 2000. Species-specific surveys for a variety of wildlife species were conducted on site from May through July of 2001, and surveys to map biotic habitats were conducted during October 2001. Additional surveys were conducted for the California tiger salamander from December 2002 through April 2003. Condor Country Consulting (2003) conducted wet season surveys for special-status branchiopods, and soil samples were analyzed for cysts of these species (Helm Biological Consulting 2004). The purpose of these surveys was to document biotic resources that may potentially pose constraints to development and to provide information on the biological resources associated with the site. Specifically, surveys were conducted to describe biotic habitats and to determine whether the site supports special-status species and/or their habitat.

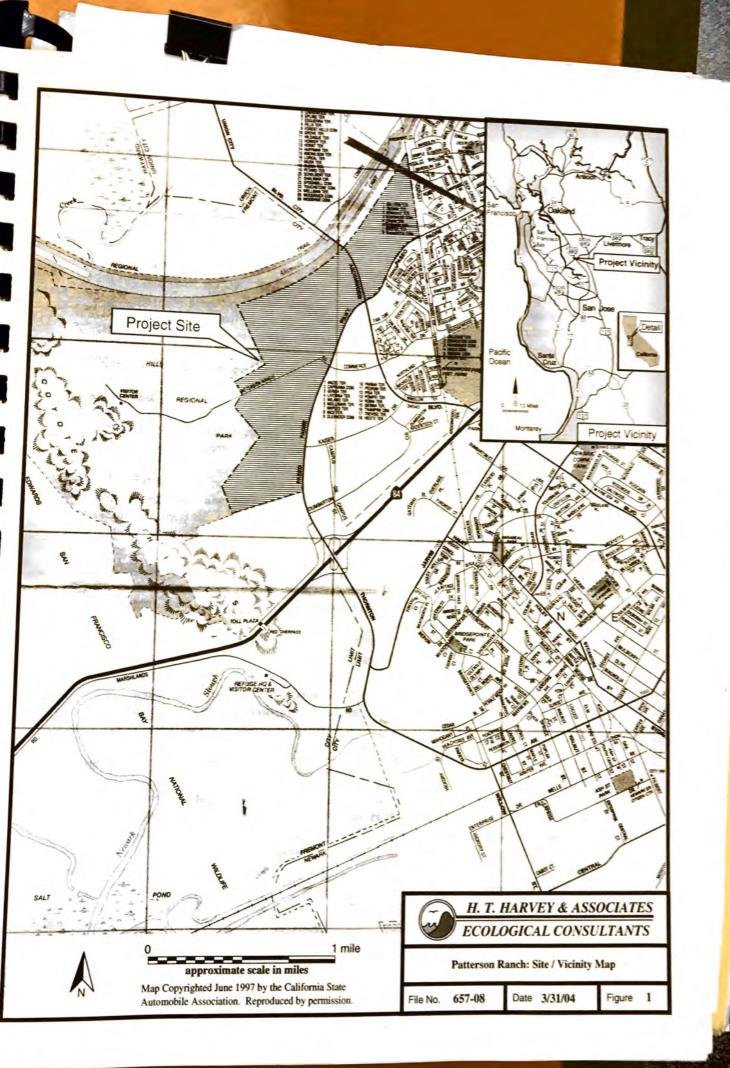
A. GENERAL AREA DESCRIPTION

The 427-acre study area is located immediately west of Paseo Padre Parkway and south of the flood control channels (Alameda Creek and the parallel "K" Line) maintained by the Alameda County Flood Control and Water Conservation District (ACFCWCD). Property owned by Cargill abuts the southern boundary and a residential neighborhood occurs along the eastern boundary separated by a railroad from the study area. The East Bay Regional Park District (EBRPD) owns the land adjacent to the site on the west side, north of Patterson Ranch Road. South of that road on the west side of the site is land owned by the ACFCWCD, but managed as open space by EBRPD.

Elevation does not vary significantly across the site and averages approximately 10 feet National Geodetic Vertical Datum. The topography of the site slopes gently to the west and northwest. The average annual precipitation for the adjacent city of Newark is approximately 13.64 inches per year (Soil Conservation Service [SCS] 1981).

A flood control channel ("P-line") bisects the southern portion of the site. Patterson Slough follows a meandering course in a northwesterly direction across the central portion of the site, which used to flow into Alameda Creek before the EBRPD built the "Dust Marsh" that dammed up the natural flow from Patterson Slough. The "K-line," another flood control channel (also known as Crandall Creek), is on the northern perimeter of the site and crosses the eastern portion of the property. The EBRPD owns a 100-foot wide strip of land between the site and the "K-line" on the west side of Ardenwood Boulevard. A public trail is in that strip of land.

Patterson Ranch has been maintained in agricultural production for more than fifty years. During this period the entire site, except for creek and slough, has been intensively farmed with the soil planted and tilled one or more times every year, reducing use of the site by many species of wildlife.



II. BIOTIC HABITATS

The following section is provided as background information in order to facilitate a discussion of existing biotic resources on site and to describe special-status species habitats that may occur.

The site supports three biotic habitats including agricultural fields, mixed riparian and aquatic freshwater emergent habitat. Roads and the farm machinery storage yard comprise developed areas on site (Figure 2). Where appropriate, the communities have been named based on Holland's system of classification (1986) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Habitats on site were mapped with the aid of aerial photographs.

A. AGRICULTURAL FIELDS

1. Vegetation

Agricultural fields habitat occupies the vast majority of the study area (Figure 2). These fields and surrounding agricultural access roads comprise recently disked areas characterized by bare, disturbed soils that currently support little vegetation. Agricultural fields on the property are managed to produce corn (Zea mays), alfalfa (Medicago sativa), and gladiolas (Gladiola spp.). Portions of the site have been grazed in the past. Numerous, scattered patches of ruderal vegetation too small to map occur around the margins of agricultural fields throughout the study area. The majority of the ruderal vegetation on the property consists of disturbance-oriented, non-native, herbaceous species. These include Harding grass (Phalaris aquatica), Italian wild rye (Lolium multiflorum), rabbitsfoot grass (Polypogon monspeliensis), curly dock (Rumex crispis), prickly ox-tongue (Picris echioides), wild lettuce (Lactuca serriola), field mustard (Brassica rapa), wild oats (Avena fatua), and wild radish (Raphanus sativus).

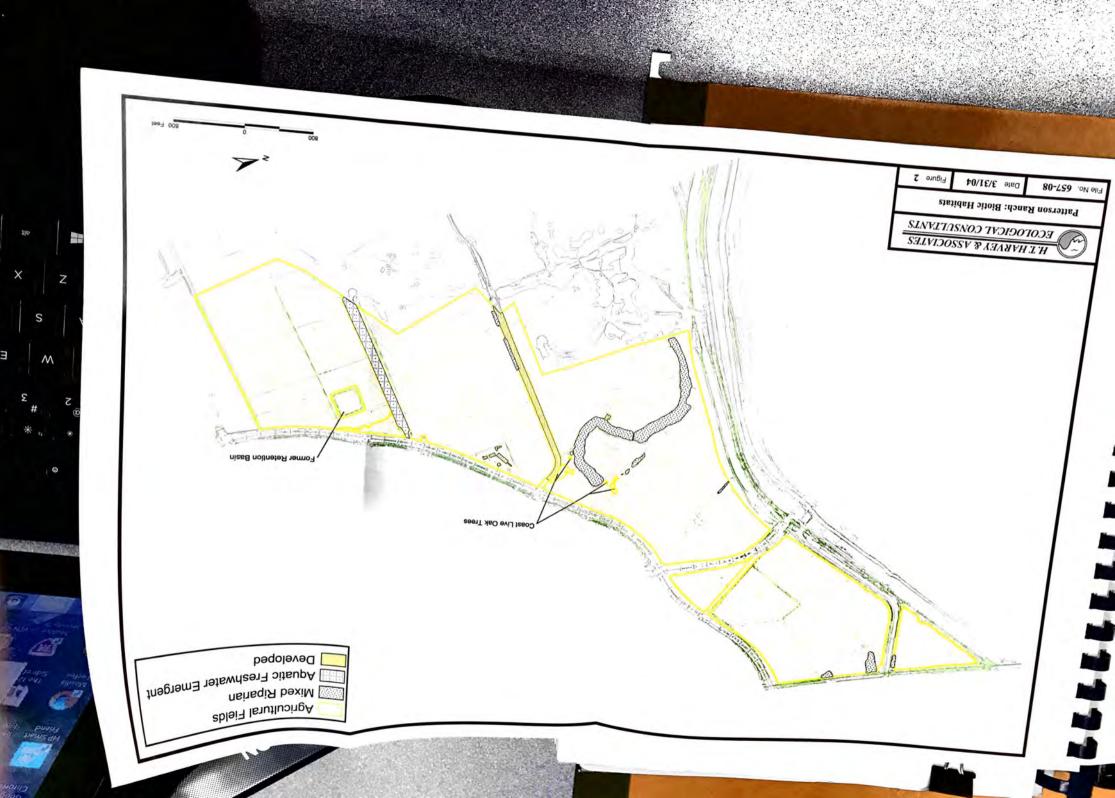
Several features occur within these agricultural fields, but have not been mapped as separate habitats. Several large coast live oaks (*Quercus agrifolia*) are found near the intersection of Patterson Ranch Road and Paseo Padre Parkway, but with a disked understory, they do not constitute a separate habitat type. Similarly, a former detention basin in the southern portion of the site was mapped as disked agricultural land, as it is no longer used for water retention. This feature was removed in the winter of 2003-04.

2. Wildlife

Virtually the entire site is planted each year as it has been since at least the 1950's. These disked fields offer little in the way of wildlife habitat, as both food and shelter are either scarce or absent from these areas. Mourning doves (Zenaida macroura), Rock doves (Columba livia), Brewer's Blackbird (Euphagus cyanocephalus), and Cliff Swallows (Petrochelidon pyrrhonota) were all observed flocking in these areas to forage on invertebrates that have been turned over by disking. The Loggerhead Shrike (Lanius ludovicianus) and American Kestrel (Falco sparverius), as well as Turkey Vultures (Cathartes aura) were all observed foraging in this habitat type.

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Upon occasion in the past, these fields have been fallowed, although for only a single planting season. When fallow, the fields on site are overgrown with dense vegetation that covers most of the ground surface. These fields can offer good habitat to wildlife, particularly small mammals that can live under the vegetation and therefore be protected from predation. The California ground squirrel (*Spermophilus beecheyi*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*) all may use this dense cover for shelter and nesting. Gopher snakes (*Pituophis melanoleucus*) make use of mammal burrows for shelter and reproduction. Bird species are somewhat limited but include the American Goldfinch (*Carduelis tristis*), Song Sparrow (*Melospiza melodia*), and various birds that are associated with the adjacent remnant riparian corridor. The insects and small mammals that inhabit these areas make them excellent foraging habitat for Red-tailed Hawks (*Buteo jamaicensis*), White-tailed Kites, and other birds of prey.

The fields offer foraging opportunities for a number of bird and mammal species. California ground squirrels are abundant in these areas, and western fence lizards (*Sceloporus occidentalis*) make use of their burrows for shelter. Bird species include those listed for disked fields, in addition to Killdeer (*Charadrius vociferous*), Great Egrets (*Casmerodius albus*), and Red-winged Blackbirds (*Agelaius phoeniceus*).

The riparian vegetation associated with Patterson Slough (Figure 2) allows riparian associated wildlife species access to adjacent agricultural fields. During wetter periods, Pacific tree frogs (*Hyla regilla*), western toads (*Bufo boreas*), and garter snakes (*Thamnophis* spp.) may forage here. Great Blue Herons (*Ardea herodias*), Great Egrets, Snowy Egrets (*Egretta thula*), and raccoons (*Procyon lotor*) also forage at the edge of this habitat. Once the area dries out, blackbirds and other species foraging over the agricultural fields will move into this area as well.

B. MIXED RIPARIAN

1. Vegetation

Mixed riparian habitat occurs along the opposing banks of Patterson Slough, and directly adjacent to Patterson Ranch Road in the central portion of the property (Figure 2). The mixed riparian habitat adjacent to Patterson Ranch Road is supported largely by seasonal hydrology, and is associated with a ditch that lines the south side of the road. Two patches of remnant riparian habitat also occur in the northern portion of the study area. These riparian patches occur within two isolated, shallow depressions that do not support ponded water during the year including the winter rainfall period.

The multi-layered tree canopy includes an overstory dominated by western sycamore (*Platanus racemosa*), arroyo willow (*Salix lasiolepis*), and coast live oak (*Quercus agrifolia*). Understory shrubs include blackberry (*Rubus* sp.), American dogwood (*Cornus sericea* ssp. sericea), and poison oak (*Toxicodendron diversilobum*). Broad-leaved cattail and bur reed also occur within portions of this habitat type. The two patches of remnant riparian habitat in the northern portion of the property are dominated by arroyo willow.

2. Wildlife

The riparian forests along Patterson Slough and adjacent areas that have dense willows and oaks provide important habitat that has largely disappeared from the lower Alameda Creek areas. Willow thickets provide foraging habitat for many species of migrant songbirds and breeding habitat for several species including the Salt Marsh Common Yellowthroat (*Geothlypis trichos sinuosa*) a California species of special concern. In addition, the riparian habitats of Coyote Hills and nearby areas are fairly isolated from other areas of favorable habitat and migrant birds flying over the bay and general region are especially attracted to them. Thus, these areas represent high-value habitats for neo-tropical migrants. Pacific tree frogs and western toads breed in the channel, and garter snakes forage on these species. Red-shouldered Hawks (*Buteo lineatus*) forage along this riparian habitat for many of the smaller vertebrates associated with this habitat. Small mammals that occur here include deer mice in the willow thicket, and in association with the wet emergent vegetation, California vole. Several medium-sized mammals (*e.g.*, striped skunk (*Mephitis mephitis*), raccoon, and gray fox) also find cover and forage here. Great Blue Herons, Black-crowned Night Herons in the coast live oak trees.

C. AQUATIC/FRESHWATER EMERGENT

1. Vegetation

Aquatic/freshwater emergent habitat occurs primarily within the P-line channel and within portions of Patterson Slough (Figure 2). The deep-water flow of the P-line supports vegetation primarily along the margins of the channel. Species observed include broad-leaved cattail and acute bulrush (*Scirpus acutus* var. *occidentalis*). Aquatic/freshwater emergent species observed within portions of Patterson Creek include broad-leaved cattail, acute bulrush, and mosquito ferm (*Azolla filiculoides*). Portions of the agricultural drainage ditches in the western central and southwest areas on site also support patches of aquatic/freshwater emergent vegetation.

2. Wildlife

Many of the species occurring in the emergent vegetation of the riparian areas also occur in this habitat. Common birds found in the freshwater emergent vegetation include the Song Sparrow, Red-winged Blackbird and the Marsh Wren. Cattails and bulrushes provide important cover for many wildlife species associated with fresh water marshes and open water. In addition, many waterfowl, such as the Pied-billed Grebe (*Podilymbus podiceps*), Cinnamon Teal (*Anas cyanoptera*), American Coot (*Fulica Americana*), Northern Shoveler (*Anas clypeata*), and Canada Geese (*Branta canadensis*) occur in the open water found in this habitat.

D. DEVELOPED

Developed area occupies approximately 4.5 acres of the site and includes the agricultural structures and the farm labor camp buildings in the southern and central portions of the site, respectively (Figure 2). Developed areas are devoid of vegetation.

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1. Wildlife

The wildlife most often associated with developed areas are those that are most tolerant of periodic human disturbances, including several introduced species such as European Starlings (*Sturnus vulgaris*), Rock Doves, house mice (*Mus musculus*), and Norway rats. Norway rats typically burrow under structures near water. Native species that are able to utilize these habitats include western fence lizards, American Robins (*Turdus migratorius*), Brewer's Blackbirds, Northern Mockingbirds (*Mimus polyglottos*), Mourning Doves, House Finches, California ground squirrels, black-tailed hares, and striped skunks. Barn Owls (*Tyto alba*) may roost and breed in the agricultural buildings, foraging over adjacent habitats. Likewise, some bats that forage throughout the study area, such as Mexican free-tailed bat, Yuma bat, pallid bat, and big brown bat (*Eptesicus fuscus*), may make use of small cavities associated with structure eves, although no specific bat roosts were observed on-site.

III. SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

Information concerning threatened, endangered or other special-status species that may occur in the area was collected from several sources and reviewed by H. T. Harvey & Associates' biologists. These sources included in-house sensitive species maps of the county, the CDFG's Natural Diversity Data Base (CNDDB; 2000), the *California Native Plant Society's* [CNPS] *Inventory of Rare and Endangered Vascular Plants of California* (2001), *The Jepson Manual* (Hickman 1993), *Manual of the Grasses of the United States* (Hitchcock 1971), and miscellaneous information available through the USFWS, CDFG, technical publications, and consultation with an East Bay Regional Parks District botanist (Brad Olson, pers. comm.).

A search of published accounts of special-status species in the vicinity was conducted using the California Natural Diversity Data Base Rarefind (2000). Included in the search were the United States Geological Survey (USGS) Quadrangle Maps for Newark, California in which the site occurs, as well as the eight surrounding quadrangles: Dublin, Hayward, Milpitas, Mountain View, Niles, Palo Alto, Redwood Point and San Leandro. All species listed as occurring in Alameda County and occurring on CNPS Lists 1A, 1B, 2, 3, or 4 were reviewed. An overview of special-status species regulations is provided in Appendix A.

A. SPECIAL-STATUS PLANT SPECIES

Field surveys were conducted during the summer and fall of 2000, and the spring and summer of 2001, for habitats capable of supporting special-status plants on site. The surveys involved hiking the entire study area to observe all habitats on site. Additional field surveys were conducted during on-going wetland field monitoring in the winter and spring of 2001, 2002, 2003 and 2004.

Many of the special-status plant species occurring in the vicinity of the property are found only in habitat types that are not present in the study area. Specifically the following habitat types that could support special status plants but are absent from the site include: broadleaved upland forests, chaparral, lower montane coniferous forest, alkali playa, coastal prairie, coastal bluff scrub, coastal dunes, serpentine soils, north coast coniferous forest, closed-cone coniferous forest, meadows, and coastal salt marsh. Thus, species that occur in the region, but which do not occur in habitats or microhabitats present on site were not included or discussed below. These species include San Mateo thorn-mint (Acanthomintha duttonii), robust spineflower (Chorizanthe robusta var. robusta), Palo Alto thistle (Cirsium praeteriens), Point Reyes bird'sbeak (Cordylanthus maritimus ssp. palustris), Diablo helianthella (Helianthella castanea), bigscale balsamroot (Balsamorhiza macrolepis var. macrolepis), fragrant fritillary (Fritillaria liliacea), Marin western flax (Hesperolinon congestum), Kellogg's horkelia (Horkelia cuneata ssp. sericea), slender-leaved pondweed (Potamogeton filiformis), and most beautiful jewelflower (Steptanthus albidus ssp. peramoenus). Descriptions follow for only those species for which potential habitat occurs, or regarding which the resource agencies have expressed particular concern.

NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Federal or State Endangered Species	ed Species		
Contra Costa goldfields (Lasthenia conjugens)	FE, CNPS IB	Cismontane woodland, vernal pools, mesic valley and foothill grassland.	Potential habitat exists on site. Species determined to be absent.
California seablite (Suaeda californica)	FE, CNPS 1B	Coastal salt marshes and swamps	Potential habitat exists on site. Species determined to be absent.
Vernal Pool Tadpole Shrimp (Lepidurus packardi)	跙	Vernal pools and swales containing clear to highly turbid water.	Marginal habitat occurs on the sites with appropriate soils. Recent records occur about 7 mi south of the site. Protocol-level field surveys conducted in 2003. Species determined to be absent.
California Red-legged Frog (Rana aurora dratonii)	FT, SP, CSSC	Streams, freshwater pools and ponds with overhanging vegetation	Potential habitat on site, no hydrological connection to known populations, but the site provides a large area with potential breeding habitat. Protocol-level surveys conducted in 2000 had negative results. Presumed absent.
Bald Eagle (Haliaeetus leucocephalus)	FE, SE, SP	Occurs mainly along sea coasts, rivers and lakes; nests in tall trees or in cliffs. Feeds mostly on fish.	Rare winter visitor.
American Peregrine Falcon (Falco peregrinus anatum)	FE,SE,SP	Forages in many habitats; requires cliffs for nesting.	Occasional forager on site; no suitable breeding habitat on site.
California Clapper Rail (Rallus longirostris obsoletus)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass.	Recorded in adjacent salt marsh habitats, but no habitat on site. No recent records on site, and not expected to breed here. Presumed absent.
California Least Tern (Sterna antillarum brownii)	FE, SE	Nests along the coast on bare or sparsely vegetated, flat substrates.	Breeds along the Bay Shore at Alameda. Post-breeding foragers occur elsewhere along the bay and the salt ponds not likely on the site.
Willow Flycatcher (Empidonax traillii)	FE (extimus) SE (brewsteri)	Breeds locally in riparian habitats in mountains and southern deserts.	Uncommon migrant; those occurring on site are probably not of the listed races.
Salt Marsh Harvest Mouse (Reithrodontomys raviventris)	FE, SE	Pickleweed in saline emergent wetlands.	Records for this species occur in the area (one record about 6.5 miles to the south), but habitat for this species does not occur on the site. Salt marsh habitat, with dense stands of pickleweed, occurs in areas immediately south of the site, but this habitat is isolated from the site by a road and levee. Presumed absent.
Federal or State Threatened Species	d Species		
Western Snowy Plover (Charadrius alexandrinus nivosus)	FT, CSSC	Sandy beaches on marine and estuarine shores.	No suitable breeding or foraging habitat on site; May occur rarely in adjacent areas but not expected to breed there. Presumed absent.
Federal or State Proposed Endangered or Threatened Species	Endangered on	r Threatened Species	
California Tiger Salamander (Ambystoma californiense)	PC, CSSC	Vernal or temporary pools in annual grasslands, or open stages of woodlands.	Marginal but potential breeding habitat occurs on the site and a recent (1995) record for this species occurs about 6.5 mi. south of the site. Enhanced-level of field surveys conducted in 2002-03. Species determined to be absent
California Species of Special Concern	I Concern		
Western Pond Turtle (Clemmys marmorata)	ST	Permanent or nearly permanent water in a variety of habitats.	Potential foraging, basking, and breeding habitat on the site. Not observed during surveys.
American White Pelican (Pelecanus erythrorhynchos)	CSSC	Forages on fish found in freshwater lakes and rivers and breeds up to 150 miles from feeding	Observed foraging immediately adjacent to the site, and expected to forage on the site. No breeding habitat on or near the site.

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Table 1. Special-status Plant and Animal Species, Their Status, and Potential Occurrence on the Patterson Ranch Site,

Fremont, California.			
NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Double-crested Cormorant Phalachorcorax auritus)	CSSC	Colonial nester on coastal cliffs, offshore islands, electrical transmission towers, and along interior lake margins. Feeds on fish.	Observed flying over the site but no breeding habitat on the site, and only marginal foraging habitat on the site.
White-faced Ibis (Plegadis chihi)	cssc	Forages in freshwater marshes, and to a lesser extent, brackish areas.	Occasional visitor to region in fall and winter. Potential foraging habitat on the site.
Long-billed Curlew (Numenius americanus)	CSSC	Nests in both dry and wet uplands; occurs on beaches along coast and inland lakes, salt marshes and grain fields.	No breeding habitat but expected to forage on the site.
Califomia Gull (Larus californicus)	CSSC	Common during fall, winter, and spring; occasionally during summer.	May occur on-site throughout the year. Not expected to breed on the site.
Cooper's Hawk (Accipiter cooperii)	CSSC	Uses many habitats in winter and migration.	Observed foraging on the site and potential breeding habitat occurs in dense woodland on the site.
Merlin (Falco columbarius)	CSSC	Uses many habitats in winter and migration.	Occasional forager during migration and winter.
Prairie Falcon (Falco mexicanus)	CSSC	Forages on birds and small mammals in dry, open grasslands.	May occur on site primarily as a winter visitor; but also rarely in summer.
Northern Harrier (Circus cyaneus)	CSSC	Forages in open to herbaceous stages of many habitats.	Forages on site and potential breeding habitat on site.
Golden Eagle (Aquila chrysaetos)	CSSC	Breeds on cliffs or in large trees or structures.	May rarely fly over the site; no breeding habitat on site.
Burrowing Owl (Atheve cunicularia)	CSSC	Flat open grasslands.	No owls observed on the site but potential breeding habitat occurs on the site. Historically owls have been present on the site. Enhanced-level surveys conducted in 2000 and 2001. Presumed absent.
Short-eared Owl (Asio flammeus)	CSSC	Requires tall emergent vegetation or grasses for mating.	May occur during migration and winter.
Loggerhead Shrike (Lanius ludovicianus)	CSSC	Breeds in brushy, open areas.	Forages and possibly breeds on the site.
Saltmarsh Common Yellowthroat (Geothlypis trichas sinuosa)	CSSC	Fresh and salt water marshes; thick foraging cover; breeds in tall grass, tules, and willows.	Potential breeding habitat on the site. Observed on site.
Alameda Song Sparrow (Melospiza melodia pusillula)	cssc	Breeds primarily in tidal wetlands.	Song Sparrows observed on the site and breeding habitat on-site. However, this race is primarily restricted to tidal habitats. Observed on site.
Tricolored Blackbird (Agelaius tricolor)	CSSC	Breeds near fresh water in dense emergent vegetation.	Potential breeding habitat on the site. Observed on site. Breeds in Coyote Hills wetlands.
Salt Marsh Wandering Shrew (Sorex vagrans halicoetes)	cssc	Medium high marsh 6-8 feet above sea level with abundant driftwood and pickleweed.	No records for the area and considered rare. Marginal habitat on site, assumed absent.
Townsend's Big-eared Bat (Corynorhinus townsendii)	cssc	Roosts in caves and mine tunnels in a variety of habitats.	No records for the area and no maternity roosting habitat on site. Presumed absent.
California Mastiff Bat (Eumops perotis californicus)	cssc	Forages over many habitats; requires tall cliffs or buildings for roosting sites.	No records for the area and no roosting habitat on site. Presumed absent.
Pallid Bat (Antrozous pallidus)	CSSC	Forages over many habitats; roosts in buildings, rocky outcrops and rocky crevices in mines and caves.	Potential forager on site, but surveys did not detect any roost sites.

NAME	*STATUS HABITAT	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
State Protected Species or CNPS Species	CNPS Species		
Alkali milk-vetch	CNPS IB	Alkaline soils in playas, vernal pools, and adobe	Alkaline soils in playas, vernal pools, and adobe Potential habitat exists on site. Species determined to be absent.
(Astragalus tener var. tener)		clay areas in valley and foothill grassland.	
Congdon's tarplant	CNPS 1B	Alkaline soils; valley and foothill grassland,	Potential habitat exists on site. Species determined to be absent
(Centromadia parryi ssp. congdonii)		chenopod scrub, alkali meadows and flats.	
Western leatherwood	CNPS IB	On moist slopes in partial shade in broadleaved	Marginal habitat on site. Species determined to be absent
(Dirca occidentalis)		upland forest, closed-cone coniferous forest, chanarral cismontane woodland northcoast	
		forest, riparian forest and riparian woodland	
Hairless popcorn-flower	CNPS 1A	Alkaline soils; meadows, marshes and swamps	Potential habitat exists on site. Species determined to be absent
(Plagiobothrys glaber)			
White-tailed Kite	SP	Forages in open areas of many habitats.	Resident, breeds on the site.
(Elanus caeruleus)			
Ringtail	SP	Found in a variety of woodland types, often near	Found in a variety of woodland types, often near Marginal habitat on the site. Not known to be present along lower Alameda
(Bassariscus astutus)		water	Creek: nresumed absent

*SPECIAL STATUS SPECIES CODE DESIGNATIONS

Endangered	Thursday
Federally listed	Dadarally, listad
FE =	ETT -

- Federally listed Threatened
- State listed Threatened ST =
- Federally proposed Endangered FPE =
- Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened FC=
 - California Species of Special Concern CSSC =
 - State Protected Species SP =
- Plants presumed extinct in California CNPS 1A =

Plants rare, threatened, or endangered in California and elsewhere CNPS IB =

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1. Federal or State Endangered or Threatened Species

Contra Costa Goldfields (Lasthenia conjugens). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B. This annual herb occurs in mesic areas in cismontane woodlands, alkaline playas, valley and foothill grasslands, and vernal pools. The blooming period is from March to June. This range of this species is reported to have been reduced to Alameda, Contra Costa, Monterey, Napa and Solano counties, having been extirpated from three other counties forming its historic range, including Santa Clara County (CNPS 2001). However, the CDFG Rarefind Database reports two large populations within the Milpitas quadrangle, one about 0.4 miles west of I-880, near Sky Sailing airport, and the second in the San Francisco National Wildlife Refuge, both in Alameda County near the site. Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the goldfields. Plants were not observed during on-going field studies and this species is considered absent.

California Seablite (Suaeda californica). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B. This evergreen shrub occurs in coastal salt marshes and swamps. The blooming period extends from July to October. The California Natural Diversity Database has two records within the quadrangle search area, a historical occurrence on Bay Farm Island, Alameda County, which is now believed extirpated, and an occurrence in the salt flats at the Palo Alto Yacht Harbor, the status of which is unknown. The seasonal wetland and aquatic/freshwater emergent areas of the site at one time may have provided suitable habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the California seablite. Plants were not observed during ongoing field studies and this species is considered absent.

2. CNPS Listed Species

Alkali Milk-vetch (Astragalus tener var. tener). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. This annual herb occurs in alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grasslands. The blooming period extends from March to June. The range of this species currently includes Alameda, Merced, Solano, and Yolo counties, and has been extirpated from ten others including Contra Costa County. However, the CDFG Rarefind Database has a single recent occurrence within the quadrangle search area in the Milpitas quadrangle, in Alameda County, in the Pacific Commons Preserve (CNDDB 2000). Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the alkali milk vetch. Plants were not observed during ongoing field studies and this species is considered absent.

Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. Congdon's tarplant occurs in valley and foothill grassland, on alkaline soils. The flowering period for this species occurs from June through November. This species has been nearly extirpated from the Bay Area; extant populations are known from Monterey and San Luis Obispo Counties, and possibly Santa Clara County (CNPS 2001). The CDFG Rarefind Database has several records from as recently as 1998 within the quadrangle search area. The records are: three in the Milpitas quadrangle, one west of the Nimitz Freeway near Cushing Parkway, another in Sunnyvale Baylands Park, and a final occurrence in Alviso; two in the Dublin quadrangle, one in the Camp Parks Reserve Forces Training Area and the other in San Ramon Valley; one in the Niles quadrangle near the junction of Fremont Boulevard and Auto Mall Parkway; and finally an occurrence in the Mountain View quadrangle, near the mouth of Stevens Creek. The agricultural areas including the ruderal margins of these areas on site may provide suitable habitat, and the soils of the site are all alkaline. Plants were not observed during on-going field studies and this species is considered absent.

Western Leatherwood (*Dirca occidentalis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B. Western leatherwood is found on moist slopes in partial shade in a variety of habitats. These habitats include broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland. This deciduous shrub flowers from January through April. Western leatherwood is known from Alameda, Contra Costa, Marin, Santa Clara, San Mateo, and Sonoma counties (CNPS 2001). The CDFG Rarefind Database reports only three occurrences of western leatherwood within the quadrangle search area; these are located in Mountain View and Palo Alto. Although the riparian area may provide marginal habitat for this species, the small, fragmented, and somewhat open canopy nature of the habitat makes it unlikely that this species will occur. This species is considered absent.

Hairless Popcorn-flower (*Plagiobothrys glaber*). Federal Listing Status: None; State Listing Status: None; CNPS List 1A. This annual forb occurs in wet, alkaline soils of meadows and coastal salt marshes and swamps. The blooming period ranges from March to May. Most occurrences have been reported from the southern shore of San Francisco Bay and alkaline flats in the southern Santa Clara Valley, but it has also been reported to occur in the Altamont quad (CNDDB 2000). Seasonal wetland habitat with alkaline soils may have at one time provided potential habitat for this species, however, over 50 years of continued intensive agricultural practices severely reduce the quality of this habitat to support the hairless popcorn flower. Plants were not observed during on-going field studies and this species is considered absent.

B. SPECIAL-STATUS ANIMAL SPECIES

Wildlife surveys were conducted at the site during the mid- to late summer of 2000 and during spring and summer of 2001. Surveys for <u>Burrowing Owls</u>, other raptors, and other wildlife were conducted on July 19, 21, 26, and August 9, 2000. Other special-status wildlife surveys were conducted on August 2, 25, 31, and September 7, 2000. Surveys for amphibians and reptiles, including the <u>red-legged frog</u> were done on August 2, 12, 13, 14, 15, 18, 21, 27, 28, 31, and September 1, 4, 7, and 14, 2000. They concentrated on the areas of watercourses, including Patterson Slough, the Alameda Creek flood control channel, the "P" line and the "K"-line (both flood control channels. The special-status animal species that occur in the vicinity of the site in habitats similar to those found on the site are described below.

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Surveys for <u>Burrowing Owls</u> and other nesting raptors (potentially including Red-tailed Hawks, White-tailed Kites, and other locally-occurring species) were conducted on 7, 12, 14, 15, and 19 June; 10 July; and 13 and 15 August 2001, in addition to work completed in 2000. Surveys were conducted by walking transects and visually inspecting the entire site for potential nesting habitat. When potential habitat was encountered, area searches were conducted for nesting birds, nest structures, or secondary evidence indicating the presence of these species.

Additionally, this report includes an overview of the results of surveys conducted by our firm for the <u>California tiger salamander</u> in the winter of 2003-03 (Appendix B). Condor Country Consulting (2003; Appendix C) conducted wet season surveys for special-status branchiopods in the winter and spring of 2002-03. Soils taken during those surveys were analyzed for branchiopod cysts by Helm Biological Consulting (2004; Appendix D).

1. Federal or State Endangered or Threatened Species

Vernal Pool Tadpole Shrimp (Lepidurus packardi). Federal Listing Status: Endangered; State Listing Status: None. Vernal pool tadpole shrimp occur primarily in the Central Valley and range from east of Redding in Shasta County south to the San Luis National Wildlife Refuge in Merced County (59 FR 48136). Outside of the Central Valley, a single population of the vernal pool tadpole shrimp occurs about 6.5 miles to the south of the site in the Warm Springs Seasonal Wetland in Fremont, Alameda County (Caires et al. 1993). They have also been found on the Catellus site. Tadpole shrimp eat microscopic organisms, detritus, dead tadpoles, earthworms, frog eggs and mollusks. Females deposit eggs on vegetation on the pool bottom. Pools containing vernal pool tadpole shrimp have clear to highly turbid water and range in size from less than an acre to 90 acres. These pools may be highly turbid and mud-bottomed or grass-bottomed in old alluvial soils underlain by hardpan. Pools generally have low conductivity, low total dissolved solids and low alkalinity (Eng et al. 1990). Tadpole shrimps are demersal (i.e., they are generally benthic, but are capable of swimming), and they also burrow in soft sediments. The periodic flooding that allowed vernal pool species to disperse became rare as people built dams, drainage canals and other barriers. However, vernal pool tadpole shrimp eggs can pass through bird digestive tracts intact and may be dispersed by birds.

There are no records of tadpole shrimp on the site. Habitat on site is marginal, and there are no areas that have the typical hummock topography of vernal pools. However, there are areas on site that pond seasonally, and the underlying soil composition is consistent with those soils supporting vernal pool tadpole shrimp on the Warm Springs Seasonal Wetland to the south (Pat Boursier, pers. obs.). Based on habitat assessment, the species is very unlikely to occur, as the species requires 3-4 weeks of ponding to develop to maturity. However, it has been found in ditches and other unlikely locations at the Catellus site in Fremont. <u>Surveys for this species conducted during 2002-03 proved negative</u> (Condor Country Consulting 2003).

California Red-legged Frog (*Rana aurora draytonii*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern. The USFWS listed the California red-legged frog as federally threatened on May 23, 1996. The red-legged frog is a medium-sized frog with reddish legs. This species is generally restricted to riparian habitats in California and northern Baja California. Red-legged frogs prefer deep, quiet pools (greater than 3 feet deep) in creeks,

rivers, or lakes below 1,000 meters in elevation (about 3,000 feet). Habitat requirements include fresh emergent or dense riparian vegetation, especially willows adjacent to shorelines. Red-legged frogs can survive in seasonal bodies of water that are dry for short periods if there is a permanent water body or dense vegetation stands nearby.

The adults are normally active at night and breed in ponds and creeks, or in marshes, during the late winter, or early spring, after waters recede. Females attach eggs in a single cluster to a vegetation brace just under the surface of the water. The eggs hatch in just over a week and the resulting larvae feed on plant and animal material on the bottom of the pond. It takes at least four months for the larvae to metamorphose into juvenile frogs.

On February 18, 1997 the USFWS released protocols for assessing presence or absence of the California red-legged frog on site. Appropriate site assessments include an analysis of all known sightings within a five-mile radius, and a description of the habitats both within the site and within one mile from the boundary of the site. The site assessment also includes a description of the upland and aquatic habitats of the site. Any subsequent surveys are generally conducted between May 1 and November 1. All aquatic habitats (*i.e.*, suitable habitat) would be surveyed on four separate occasions (two diurnal and two nocturnal surveys). Diurnal surveys should be conducted on clear, sunny days and nocturnal surveys should be conducted on warm, still nights between one hour after sunset and 12 midnight.

California red-legged frogs have been observed in a number of aquatic and terrestrial habitats throughout their historic range. The key to the presence of red-legged frogs in these habitats is the presence of perennial (or near perennial) water and the general lack of introduced aquatic predators. These predators include centrarchid fishes (e.g., largemouth bass [Micropterus salmoides], green sunfish [Lepomis cyanellus], and bluegill [L. macrochirus]), crayfish (Pacifastacus leniusculus and Procambarus clarkii), and bullfrogs (Rana catesbeiana).

The site is located near Alameda Creek, a watershed that supports California red-legged frogs. However, according to the CNDDB (2000) and other records, there are relatively few records, and no recent records, from low-lying bayside areas of Alameda County where this property is located.

On September 11, 2000, the USFWS (65 Federal Register § 54892) proposed critical habitat for the California red-legged frog. The closest designated critical habitat lies east of the site, along the Walpert Ridge in Unit 15, the East Bay-Diablo Range Unit. Although habitat on the property appears suitable for this species, no red-legged frogs were detected during protocol-level surveys in 2000. Furthermore, it is unlikely that a frog could be washed down from the upper watershed because of existing structure barriers between the known populations and the site. Therefore this species is presumed absent from the property.

California Clapper Rail (*Rallus longirostris obsoletus*). Federal Listing Status: Endangered; State Listing Status: Endangered. The California Clapper Rail is a locally common permanent resident of coastal salt and brackish marshes around San Francisco Bay and Monterey Bay. Most of the population exists at San Francisco Bay, but this subspecies may also still occur at Morro and Humboldt bays (Wilbur and Tomlinson 1976). Since the mid-1800s,

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about 80% of San Francisco Bay's marshlands have been eliminated through filling, diking, or conversion to salt evaporation ponds. As a result, the California Clapper Rail lost most of its former habitat, the population declined severely, and the species was listed as endangered.

Clapper Rails along the Pacific Coast prefer salt marshes and brackish marshes dominated by cordgrass (*Spartina foliosa*) and marsh gumplant (*Grindelia stricta*); in brackish marshes they also frequent areas supporting bulrushes. These birds also require shallow areas or mudflats for foraging, particularly channels with overhanging banks and vegetation. As a refuge from extreme high tides and as a supplementary foraging area, rails move to the upper marsh vegetation where it intergrades with peripheral upland vegetation. These birds have no requirement for fresh water.

Marsh habitats on the site do not provide suitable breeding habitat for this species, and the aquatic emergent vegetation is likely too far from areas with appropriate habitat for this species to occur on the site as an occasional visitor. Therefore, there is no on-site habitat and the California Clapper Rail is presumed absent from the site.

Salt Marsh Harvest Mouse (Reithrodontomys raviventris). Federal Listing Status: Endangered; State Listing Status: Endangered, Protected. The salt marsh harvest mouse is found only in saline wetlands of San Francisco Bay and its tributaries. The southern subspecies *R. raviventris* is restricted to an area from San Mateo County and Alameda County along both sides of San Francisco Bay south to Santa Clara County. The salt marsh harvest mouse occurs with the closely related, ubiquitous and abundant western harvest mouse (*R. megalotis*) at upper edges of marshes and in marginal areas. Both animals occur in pickleweed, but the salt marsh harvest mouse replaces the western harvest mouse in denser areas of pickleweed. *R. raviventris* has declined substantially in recent decades. This decline is due primarily to diking and filling of marshes, subsidence, and changes in salinity brought about by increasing volumes of fresh water discharge into the bay.

Densely vegetated, tidal, saline marsh dominated by pickleweed is generally considered prime habitat for this species. Moderate populations of salt marsh harvest mouse have also been found in diked marshes. Salt marsh harvest mice may also be found in grassland habitats adjacent to pickleweed marshes, particularly during the spring. These grasslands are generally used by harvest mice only in the spring when new grass growth affords suitable cover and possibly forage. Salt marsh harvest mice may also use adjacent grasslands on a daily basis to avoid high tide events.

<u>Appropriate habitat for this species does not occur on the site</u>. However, pickleweed does occur in dense stands south of the levee road adjacent to the extreme southwest corner of the property. Because no cover occurs on this road, and the grassland is probably over 25 feet from the pickleweed habitat, the salt marsh harvest mouse is not expected to occur in this adjacent grassland, or any other areas of the site.

2. Federal or State Candidate Species

California Tiger Salamander (Ambystoma californiense). Federal Listing Status: Candidate; State Listing Status: Species of Special Concern. On April 18, 1994, the USFWS determined that the proposal to list the tiger salamander as endangered was warranted but precluded due to the pending listing action of higher priority species (Federal Register 59:74). The USFWS is supposed to review this decision annually until such time as the agency determines that the listing is either unwarranted or warranted. The status of the tiger salamander presently remains unchanged.

This species' preferred habitat is temporary (minimum of 3 to 4 months) or permanent water sources (*i.e.*, vernal pool, ephemeral pool, or human-made ponds) surrounded by upland habitats that support small mammal burrows. The ponds provide the breeding and juvenile habitat, while small mammal burrows (*e.g.*, ground squirrel or pocket gopher) in the upland habitats support adult salamanders during the dry season.

Adults often emerge from the burrows at night during the first moderate to heavy winter rains and migrate to vernal pools, seasonal ponds, or human-made ponds, where they lay their eggs. The eggs are attached singly or in clumps to vegetation under or directly on the bottom of the pool if emergent vegetation is lacking. The eggs hatch approximately one week after they are deposited. The larvae prey upon invertebrates and other amphibian larvae for three to six months, during which time they metamorphose into juveniles. Juveniles typically leave the pools in large numbers during a one- to two-week period, usually as the ponds dry. The juveniles then search for available burrows. Juveniles aestivate in these burrows until the following winter.

Tiger salamanders take several years to reach maturity and do not necessarily breed every year, even if sufficient habitat is present. Their range is restricted to the Central Valley and Coast Range of California from Butte County south to Santa Barbara County. They have disappeared from a significant portion of their range due to habitat loss from agriculture and urbanization and the introduction of non-native aquatic predators (e.g. bluegill [Lepomis macrochirus], largemouth bass [Micropterus salmoides], mosquitofish [Gambusia affinis], and bullfrogs [Rana catesbeiana]).

This species occurs approximately 6.5 miles to the south in the Warm Springs Seasonal Wetlands area. Surveys have not been conducted for this species, but the habitat is very marginal. There appear to be no areas on-site that would pond seasonally for the required 3-4 months to complete a breeding cycle. The aquatic habitat associated with Patterson Slough is very unlikely to support breeding CTS, in part because the area supports bullfrogs and probably fish, both of which feed on CTS juveniles. There are several depressions off-site, within the East Bay Regional Park land, that may pond, but probably not for the required length of time to support breeding. Surveys conducted in the winter and spring of 2002-03 proved negative. This species is presumed to be absent from the site.

C. OTHER SPECIES

The following suite of species really does not seriously constrain site development. Either they do not occur, occur in areas that would not be affected by development, or potential impacts are minimal. Most are protected from disturbance during the breeding season, so there may be either the need to conduct preconstruction surveys or phase construction into the non-breeding season.

Northern Harrier (Circus cyaneus). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Northern Harrier is commonly found in open grasslands, agricultural areas and marshes. Nests are built on the ground in areas where long grasses provide cover and protection. Harriers hunt for a variety of prey, including rodents, birds, frogs, reptiles, and insects by flying low and slow in a traversing manner using both sight and sound to detect prey items. Harriers were observed on the site during surveys and potential breeding habitat occurs in the tall herbaceous vegetation alongside Patterson Creek on the site. Future development resulting in impacts to foraging habitat of this species is unlikely to have significant impacts on Northern Harrier populations due to the availability of foraging habitat elsewhere in the region. However, development in marshes, ruderal habitats, grasslands, or other habitats having tall, dense herbaceous vegetation should be preceded by preconstruction surveys for nesting harriers if development is to occur during the breeding season (February through August).

White-tailed Kite (*Elanus caeruleus*). Federal Listing Status: None; State Listing Status: Protected. This species prefers habitats with low ground cover and variable tree growth. Kite nests are built near the tops of oaks, willows, or other dense broad-leafed deciduous trees in partially cleared or cultivated fields, grassy foothills, marsh, riparian, woodland, and savanna. Kites prey primarily on small rodents (especially the California vole), but also feed on birds, insects, reptiles, and amphibians. When prey is abundant these birds may rear two broods in a single breeding season. Once considered endangered, the kite is now fairly common, though fully protected in the State of California.

A pair of White-tailed Kites nested on the site during the 2000 breeding season (Figure 3). Two adult and 3 to 4 juvenile White-tailed Kites were noted proximate to the fields at the high end of Patterson Creek on 7 June 2001. White-tailed Kite adults and the presence of newly fledged juveniles at the site were indicative that they were breeding on the property. An adult and juvenile were observed again on 19 June 2001, a possible nest was detected in a sycamore tree in the area of the "V" formed by the east side of Patterson Creek. To ensure that no White-tailed Kite nests are disturbed during construction activities, preconstruction surveys should be conducted if development is to occur during the breeding season (February through August).

Cooper's Hawk (Accipiter cooperii). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Cooper's Hawk is a medium-sized hawk that preys on a variety of bird species and occasionally takes small mammals and reptiles. Breeding pairs in California usually select nest sites within dense stands of live oak woodland, riparian habitats, or other wooded areas. However, pairs may also nest in sparsely wooded areas and, especially in recent decades, nesting pairs have been found breeding in suburban areas and parks in the San



Saltmarsh Common Yellowthroat (*Geothlypis trichas sinuosa*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Saltmarsh Common Yellowthroat inhabits emergent vegetation and breeds in fresh and brackish marshes and associated upland areas in the San Francisco Bay Area. This subspecies (one of the approximately 12 subspecies of Common Yellowthroat recognized in North America) breeds from mid-March through early August and pairs frequently raise two clutches per year. Because these subspecies cannot be reliably distinguished in the field, determination of the presence of Saltmarsh Common Yellowthroat can be achieved only by locating a nest in the breeding range known for this subspecies, or by observing them during the summer months when only the Saltmarsh Common Yellowthroat is present. Although little is known regarding the movements of this taxon, the wintering areas have been described as coastal salt marshes from the San Francisco Bay region to San Diego County (Grinnell and Miller 1944).

Yellowthroats were not observed on the site in 2000. They were detected in all surveyed wetland and riparian habitats throughout the site (Figure 3) during the 2001 surveys. At all sites there was also evidence of breeding activity. Males were observed singing, carrying food, and defending territories on 12 and 19 June, and juvenile birds were observed on 19 June 2001. They occurred in relatively high densities. Ten individuals were detected in approximately 2000 linear feet of channel. Forty-three individuals were counted in the wetland and riparian areas.

Alameda Song Sparrow (*Melospiza melodia pusillula*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Alameda Song Sparrow is one of three subspecies of Song Sparrow breeding only in salt marsh habitats in the San Francisco Bay area. Locally it is most abundant in the taller vegetation found along tidal sloughs, including salt marsh cordgrass and marsh gumplant. Although it is occasionally found in bulrushes in brackish marshes, the Alameda Song Sparrow is very sedentary and is not known to disperse upstream into freshwater habitats. Populations of the Alameda Song Sparrow have declined due to the loss of salt marshes around the bay, although within suitable habitat it is still fairly common.

The location of the interface between populations of the Alameda Song Sparrow and those of the race breeding in freshwater riparian habitats (*M. m. gouldii*) along Alameda Creek is not known due to difficulties in distinguishing individuals of these two races in the field.

The presence of the Alameda Song Sparrow on the site is not known due to difficulties in distinguishing among subspecies in the field. The Alameda Song Sparrow is most abundant in the taller vegetation found along tidal sloughs, including salt marsh cordgrass (*Spartina foliosa*) and marsh gumplant (*Grindelia stricta*). Although it is occasionally found in bulrushes in brackish marshes, the Alameda Song Sparrow is very sedentary and is not known to disperse upstream into freshwater habitats. It is possible that individuals of this race could occur in bulrush stands adjacent to the Alameda Creek flood control channel. On 19 June 2001 biologists counted 10 Song Sparrows in the wetlands in the northwest portion of the site, south of Patterson Creek (Figure 3).

Tricolored Blackbird (Agelaius tricolor). Federal Listing Status: None; State Listing Status: Species of Special Concern. Tricolored Blackbirds are found almost exclusively in the



Central Valley and central and southern coastal areas of California. The Tricolored Blackbird is highly colonial in its nesting habits and forms dense breeding colonies of up to tens of thousands of pairs. This species typically nests in tall, dense, stands of cattails or tules, but also nests in blackberry, wild rose bushes and tall herbs. Nesting colonies are typically located near standing or flowing freshwater. Tricolored Blackbirds form large, often multi-species, flocks during the nonreproductive period and range more widely than during the reproductive season.

Tricolored blackbirds could forage in most of the open habitats on the site during the nonbreeding season. In addition, records occur for this species on the site and in the adjacent Coyote Hills Regional Park (Environmental Science Associates 1991).

No Tricolored Blackbirds were observed during reconnaissance-level surveys in July and August 2000. On 12 June 2001 four male Tricolored Blackbirds and an unknown number of females and/or juveniles were observed in a mixed species flock foraging on site (Females and hatch-year blackbirds are not readily distinguishable by field observation; Figure 3). The flock roosted in the wetland vegetation alongside the "P-line" channel. A Tricolored Blackbird was also observed near an agricultural pond in a mixed species flock. Appropriate foraging habitat exists throughout the site, nesting habitat occurs in dense shrubs and emergent vegetation within wetland and riparian habitats on the site. Moderate numbers are known to winter in mixed flocks of blackbirds on the site (T. Ryan pers. obs.).

Pallid Bat (Antrozous pallidus pacificus). Federal Listing Status: None; State Listing Status: Species of Special Concern. Pallid bats are pale to light brown in color, and the Pacific race is one of the state's largest bats. Coastal colonies commonly roost in deep crevices in rocky outcroppings, in buildings, under bridges, and in hollow trees. Colonies can range from a few individuals to over a hundred. Some female/young colonies use their day roost for their nursery as well as hibernacula while other colonies migrate locally on a seasonal basis. Although crevices are important for day roosts, night roosts often include open buildings, porches, garages, nighway bridges, and mines. Pallid bats may travel up to several miles for water or foraging sites if roosting sites are limited. Pallid bats prefer foraging on terrestrial arthropods in dry open grasslands near water and rocky outcroppings or old structures. Myotis bats were observed foraging over agricultural lands suggesting bat roosts do occur on the site. Pallid bats were not detected during surveys. No impacts to nursery colonies would be expected.

Cliff Swallows and White-throated Swifts. Several localities are notable not for harboring special-status species, but for supporting colonies of non-status (but protected) species. Nesting Cliff Swallows were noted at three locations adjacent to the site. A nesting colony of approximately 175 Cliff Swallows was noted at the railroad bridge (Figure 3). That bridge is unlikely to be affected by any potential development scenario on the site. Another Cliff Swallow nesting colony of approximately 30 pairs were noted at the bridge over the slough channel. That arm-road bridge is likely to be removed if the site is developed. The third was inside a box sulvert and consisted of approximately 20 pairs. These Cliff Swallows were seen in large numbers foraging over much of the site. At least 4 pairs of White-throated Swifts were noted bridge in the drainage holes of the railroad bridge, and using the northernmost parcels of the property as foraging areas.

If the farm-road bridge is removed, that work should be completed in the non-breeding season. Any restoration or enhancements on site could incorporate swallow foraging habitat and nesting structures or surfaces.

IV. RECOMMENDATIONS

The largest concentration of sensitive biological resources, including wetland and riparian habitats, and potential habitat for special-status plants and wildlife, occurs on the southern one-half of the Patterson Ranch study area (Figure 3). These areas include Patterson Slough and the associated riparian, aquatic and emergent habitats. Protection of areas within this portion of the site, and appropriate buffers would avoid most of the potentially significant affects of development. Moreover, the potential for enhancement and restoration of wetland habitat is very high in these locations, and their proximity to open space would further enhance their values. Expansion of the D.U.S.T. Marsh and other wetlands of adjoining East Bay Parks land have the highest potential to increase habitat value. A combination of permanent and seasonal wetlands could produce a highly valuable, diverse, wetland complex.

Buffers would also assist with protecting and enhancing habitat values. A buffer of approximately 100 feet along the opposing banks of Patterson Slough including portions of the agricultural fields with wetland characteristics dominated by cattails south of the Slough should be incorporated in the planning concept wherever possible.

The next most biologically sensitive portions of the site, and therefore those with greatest implications to site planning, include those directly adjacent to Alameda Creek and the K-Line (Crandall Creek). Buffers along these areas would help to preserve the existing habitat values, but these areas are less sensitive biologically than the areas mentioned above.

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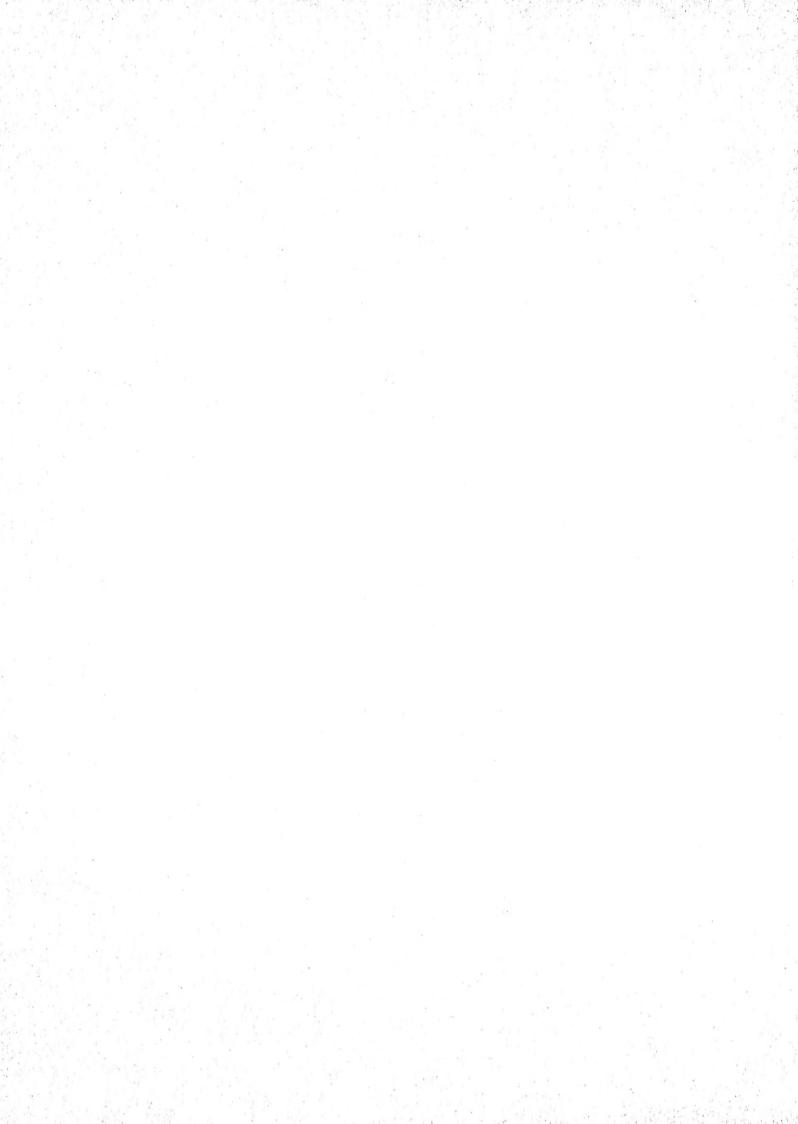
A. PERSONS CONTACTED

Brad Olson. East Bay Regional Park District. Phone number 510-544-2622.

Patterson Ranch Biological Opportunities and Constraints Analysis

APPENDIX B.

CALIFORNIA TIGER SALAMANDER 2002/2003 REPORT



ARDENWOOD FOREST CALIFORNIA TIGER SALAMANDER 2002/2003 REPORT

Prepared by

H. T. HARVEY & ASSOCIATES

Patrick J. Boursier, Ph.D., Principal David L. Plumpton, Ph.D., Project Manager Julie Klingmann, M.S., Project Manager Norman R. Sisk, M.S., Herpetologist

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Project 657-08

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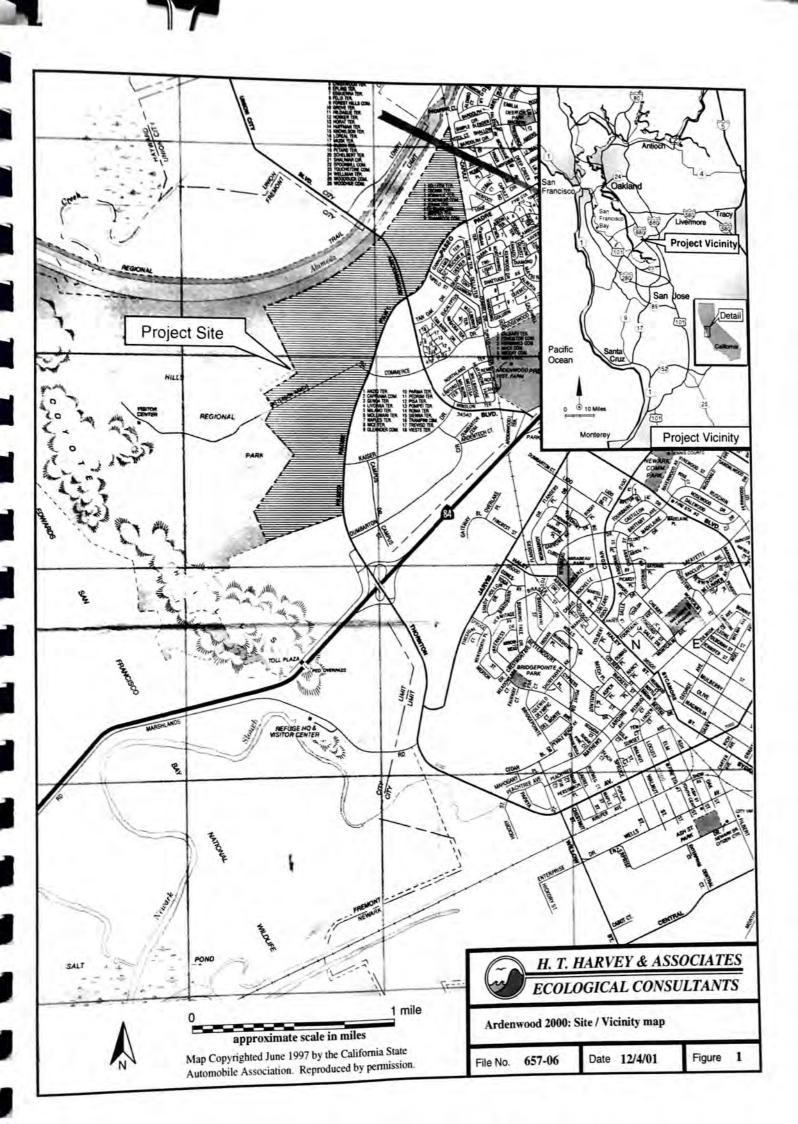
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INTRODUCTION

1 - B. S. H. B. S. Star

This report describes protocol-level surveys for the California tiger salamander (*Ambystoma californiense*; State designated as a species of special concern). Surveys were conducted on the Ardenwood Forest proposed development site (Figure 1) during the 2002-2003 winter and spring breeding season to determine the salamander's presence or absence.



METHODS

Five nocturnal California tiger salamander (CTS, Ambystoma californiense) surveys were conducted by H. T. Harvey & Associate staff biologists on 12 December 2002, 16 December 2002, 12 February 2003, 15 February 2003, and 31 March 2003. The 12 and 16 December 2002 and 14 March 2003 surveys were conducted according to the recommendations issued by the California Department of Fish and Game (1997). However, due to insufficient rainfall, the surveys conducted 12 and 15 February did not meet protocol standards. On 12 February, significant rainfall occurred during the day, but rainfall had ceased by the time the survey was initiated. On 15 February, the rainfall, though moderate to heavy during the survey, did not begin until about the time the survey was initiated.

In all cases, surveys consisted of searching the following areas: 1) the berm along the stream at the northern boundary of the site, 2) the canal that intersects Paseo Padre Parkway in the southern half of the site, 3) the small pond near Paseo Padre Parkway just south of the canal, and 4) the elevated roadbed and surrounding area along the southern boundary of the site. All potential aestivation habitats for salamanders (under debris, in cracks, and the entrances of ground squirrel and gopher burrows) were examined. Handheld flashlights and headlamps were used during the surveys.

In addition, two daytime aquatic surveys for larval salamanders were conducted in the small pond near Paseo Padre Parkway on 14 March 2003 and 28 April 2003. These surveys, which consisted of dip-netting the water at the edge of the pond, met California Department of Fish and Game (1997) protocol standards. The southwestern corner of the project site, which pools water during wet periods, was dry on 14 March and 28 April and was not sampled.

RESULTS

No CTS was observed during any of the five nocturnal surveys, and none was observed in either of the two larval surveys. On the 31 March larval survey, the pond in which larval surveys were conducted held only 2 to 4 inches of water, covering about half the bottom of the pond. On the 28 April larval survey, the pond had been reduced to two small puddles, each no more than 20 feet in diameter and less than 1 inch deep.

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DISCUSSION

Consistent with the results of the 2001-2002 survey season, CTS were not detected in the surveys conducted in 2002-2003. There are no reported records for CTS at the site. The closest record for the species listed in the CNDDB (2003) is approximately seven miles straight-line distance from the site (CNDDB occurrence no. 391).

The pond near the southeastern corner of the site provides poor breeding habitat and, even in the wettest years, may not retain water for a sufficient duration to allow CTS breeding and metamorphosis to occur. Most of the land within the survey area has been disked recently, which would have destroyed many of the burrows of California ground squirrels and other small mammals that otherwise might be present and possibly utilized by California tiger salamanders as estivation habitat. The lack of any CTS observation over a two-year survey period and the poor overall habitat quality present at the site provide strong evidence that the species does not estivate, breed, or otherwise occur at the Ardenwood site.

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Western Burrowing Owl Survey Report Patterson Ranch Specific Project Site

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Prepared for:

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July 2007

INTRODUCTION

On May 10, 14, 23 and June 19 2007, focused surveys were conducted for western burrowing owl (*Athene cunicularia*) on the Patterson Ranch Specific Plan project site. The surveys were conducted to determine if the project site is currently used by nesting or resident burrowing owls. No burrowing owls or sign was observed during the surveys.

PROJECT SITE LOCATION

The 427-acre project site is located in the City of Fremont, Alameda County, California. The project site is bounded to the north by the Alameda Creek flood control channel, to the east by Paseo Padre Parkway, to the south by undeveloped land formerly used as a salt pond, and to the west by Coyote Hills Regional Park. The project site is further described as being on the Newark 7.5-minute U.S. Geological Service (USGS) quadrangle (Township 4 South, Range 2 West, Section unassigned). The location of the project site is shown in **Figure 1**.

METHODOLOGY

The burrowing owls surveys were conducted according to the requirements of the *Burrowing Owl Survey Protocol and Mitigation Guidelines* recommended by The California Burrowing Owl Consortium (April 1993) and adopted by the California Department of Fish and Game. Josh Phillips, Principal Biologist of Pacific Biology, and Wendy Dexter, Principal Biologist of Condor Country Consulting, served as lead biologists for the surveys. Other qualified biologists participated in the surveys such that a minimum of four biologists were present for each survey.

A Phase I Habitat Assessment and Phase II Burrow Survey were conducted on May 10, 2007. These surveys served to identify and map suitable burrow habitat on the project site. This was accomplished by biologists walking meandering transects to achieve 100 percent visual coverage of the project site. The location of individual burrows or clusters of burrows were hand drawn on aerial photographs. These field notes were then converted to digital files using GIS and a map of burrow concentration areas was created.

As it was determined that suitable burrowing owl habitat was present, Phase III Burrowing Owl Surveys were initiated on May 10, 2007 (following the completion of the Phase 1 and Phase II Assessments). As required, four surveys were conducted, with focused searches occurring within the period of two hours before sunset to one hour after. The survey dates, time, and time of sunset are summarized below in **Table 1, Survey Schedule**. The focus of the surveys was the burrow concentration areas identified and mapped during the Phase I and Phase II Assessments. All suitable burrows (including small mammal and artificial burrows) and potential perching structures were inspected for sign of burrowing owl (e.g., molted feathers, cast pellets, prey remains, eggshell fragments, or excrement). Meandering transects were also regularly walked through other portions of the site (where burrow concentration areas were not identified during the Phase I and Phase II Assessments) to ensure that all burrow concentration areas were not identified during the Phase I and Phase II Assessments) to ensure that all burrow concentration areas were not identified for and surveyed; this task was generally conducted during the portion of each survey outside of two hour before sunset period. Binoculars were used by all biologists during all surveys.

Survey Number	Date	Time	Sunrise or Sunset
1	5/10/07	2:00 PM - 8:15 PM	8:06 PM
2	5/14/07	4:00 PM - 8:15 PM	8:09 PM
3	5/23/07	5:00 PM - 8:30 PM	8:17 PM
4	6/19/07	6:00 PM - 8:30 PM	8:32 PM

TABLE 1 - SURVEY SCHEDULE

BIOLOGICAL SETTING

Project Site Biological Characteristics

Patterson Ranch has been maintained in agricultural production for over 50 years. During this period, the entire site (excluding Patterson Slough and two flood control channels) has been farmed with the soil planted and tilled one or more times per year. Patterson Slough meanders in a northwesterly direction across the central portion of the property and two flood control channels (K-line and P-line, respectively) bisect the northern and southern portions of the property. The Alameda County Flood Control Channel (Alameda Creek) is separated from the northwest boundary of the site by a paved bike path constructed on top of the upper eastern bank of the channel. Coyote Hills Regional Park generally borders the project site to the west. The project site supports three habitat types, including agricultural fields, mixed riparian forest, and aquatic freshwater emergent marsh.

Burrowing Owl Habitat

Suitable habitat for burrowing owl occurs within the onsite agricultural fields. These fields are regularly disked and occupy the vast majority of the project site. Following disking, the fields are characterized by bare, disturbed soils that support little vegetation. When left undisturbed, the fields develop a dense-growth of ruderal (i.e., weedy) vegetation and non-native grasses, ranging in height from 2 to 4 feet. When present, vegetation within the fields is dominated by non-native and weedy species, including wild radish (*Raphanus sativus*), mustard (*Brassica nigra*, *B. rapa*), cheeseweed (*Malva parviflora*), wild oat (*Avena barbata*), and ripgut brome (*Bromus diandrus*). Representative photographs of the agricultural fields are included in **Appendix A**.

Suitable burrow habitat (i.e., ground squirrel burrows) is present, but the ongoing cycle of disking and the growth of tall vegetation limits the extent and persistence of suitable burrowing owl habitat on the project site. There are also several exposed pipes that provide potentially suitable burrow habitat. As shown in Figure 2, Burrow Concentration Areas, suitable burrow habitat occurs in isolated portions of the project site. These concentrations are generally along access roads, embankments, or near other features which interfere with or prevent disking. It should be noted that some of the mapped burrow concentration areas were removed by disking activities that occurred between the surveys.

Documented Occurrences of Burrowing Owl

Several burrowing owls were observed on the northern portion of the project during the winter of 2002-2003.¹ These owls were observed incidentally during vernal pool branchiopod surveys being conducted at the time. Given the timing of the sighting, it is not known if these burrowing owls remained on the project site to nest or as residents, or if the cycle of disking/vegetation growth occurring at that time would have been conducive to these potential site uses.

H.T. Harvey & Associates conducted protocol surveys for burrowing owls on the site during the species' nesting period on June 15 and 19, July 10, and August 13 and 15, 2001. No burrowing owls or sign of the species was observed during these surveys.

The California Natural Diversity Data Base (CNDDB) contains a record from 1993 of burrowing owl nesting immediately to the south of the project site on the Cargill Salt Property (Occurrence #183).

Dexter, Wendy. Condor Country Consulting, Principal Biologist. Personal Communication on May 10, 2007.

SURVEY RESULTS

No burrowing owls or recent sign (e.g., molted feathers, cast pellets, prey remains, eggshell fragments, or excrement) of the species was observed during the surveys conducted on May 10, 14, and 23 and June 19, 2007.

CONCLUSIONS

The ongoing cycle of disking and the growth of tall vegetation limits the extent and persistence of suitable burrowing owl nesting habitat on the project site. Given that no burrowing owls or sign of the species was observed on the site, it is concluded that the species does not currently nest or permanently reside on the project site.

Based on the observation of burrowing owl on the site in the winter of 2002-2003, burrowing owls historically used the site for wintering, foraging, or migration stopover habitat. In the absence of subsequent nesting surveys, it is unknown if these owls remained on the site to nest or as residents. It is also unknown if the cycle of disking/vegetation growth occurring at that time would have allowed nesting by the species on the site.

Non-breeding owls could continue to use the site for wintering, foraging, or migration stopover habitat during periods when site conditions are conducive. To prevent the potential loss of non-breeding burrowing owls, preconstruction clearance surveys are recommended. If non-breeding burrowing owls are observed, construction work can proceed after any owls have been evacuated from the site using passive relocation procedures as described in the CDFG Staff Report on Burrowing Owl Mitigation (CDFG 1995).

While burrowing owl does not currently nest on the site, the species could nest on the site in the future should land management activities be conducive to nesting by the species. The recommended clearance surveys would also serve to identify and protect any active burrowing owl nests potentially occurring at the time. However, as the *Burrowing Owl Survey Protocol and Mitigation Guidelines* only recommends the preservation or replacement of burrowing owl habitat if a site (to be developed) is used by nesting or resident burrowing owls, at this time the preservation or replacement of burrowing owl habitat would not be required.

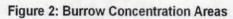




Photo 3: Burrows along access road



Photo 4: Burrows along berm



H.T. HARVEY & ASSOCIATES ECOLOGICAL CONSULTANTS

MEMORANDUM

PROJECT# 657-06

TO: Pat Boursier

FROM: Naomi Nichol, Dave Plumpton

DATE: 17 August 2001

SUBJECT: Ardenwood 2001 Wildlife Surveys

Pat:

We conducted Burrowing Owl surveys for year 2001 at the Ardenwood project site in Newark, California. The surveys were conducted to satisfy the CDFG protocol, and were also used to roughly identify areas of potential owl habitat (Figure 1). The reconnaissance survey was conducted on 7, 12, and 14 June 2001, by Joanna Cezniak, Robin Dakin, Naomi Nichol, and Scott Yaeger. Joanna Cezniak, Scott Yaeger, and Ginger Bolen conducted protocol surveys on 15 and 19 June, 10 July, and 13 and 15 August 2001.

No Burrowing Owls were observed, and no secondary evidence of use of the site by owls (e.g., castings, prey remains, feathers, excrement) was detected during any of these surveys. Thus, the site appears to have been unoccupied by owls during the nesting season of 2001. Additionally, all surveys except the last of the 4 protocol surveys were conducted during the peak nesting season (15 April – 15 July). Surveys conducted during this interval are recognized as being more reliable and definitive than those conducted before (1 February – 14 April) or after the peak interval (16 July – 31 August). Therefore, this result comes with a relatively high degree of certainty.

One area (parcel C) that was initially identified as Burrowing Owl habitat was disked between the reconnaissance survey and the first protocol survey. This activity erased any biological clues used to identify Burrowing Owl habitat. For this reason, we will be unable to determine Burrowing Owl status on this portion of the property.

SOIL ANALYSIS FOR EVIDENCE OF FEDERALLY LISTED LARGE BRANCHIOPODS AT THE PATTERSON PROJECT, CALIFORNIA

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HELM BIOLOGICAL CONSULTING 5998 Windbreaker Way Sacramento, California 95823

RESULTS

Visual examinations of the soil samples, collected from one basin, revealed no evidence of federally listed large branchiopod cysts. Table 1 below reveals the results of the soil analysis.

	Y	, <u>, , , , , , , , , , , , , , , , , , </u>	l	
		Micro-		
Basin	Insect	Turbularian	Ostracod	Cladoceran
No.	parts	Cysts		Ephippia
1			Х	X
2				x
3	X			
4				
5	Х	х		
6			Х	
7	Х		Х	х
8				
9				х
10		Х		
11	Х			х
12	X			
13	Х		х	х
14				
15			х	х
16	Х	Х		X
17				
18	Х			
19	Х			
20	х		х	

Table 1. Results of Soil Analysis

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H.T. HARVEY & ASSOCIATES ECOLOGICAL CONSULTANTS

MEMORANDUM

PROJECT# 657-06

TO:	Pat Boursier

FROM: Naomi Nichol, Dave Plumpton

DATE: 17 August 2001

SUBJECT: Ardenwood 2001 Wildlife Surveys

Pat:

We conducted Burrowing Owl surveys for year 2001 at the Ardenwood project site in Newark, California. The surveys were conducted to satisfy the CDFG protocol, and were also used to roughly identify areas of potential owl habitat (Figure 1). The reconnaissance survey was conducted on 7, 12, and 14 June 2001, by Joanna Cezniak, Robin Dakin, Naomi Nichol, and Scott Yaeger. Joanna Cezniak, Scott Yaeger, and Ginger Bolen conducted protocol surveys on 15 and 19 June, 10 July, and 13 and 15 August 2001.

No Burrowing Owls were observed, and no secondary evidence of use of the site by owls (e.g., castings, prey remains, feathers, excrement) was detected during any of these surveys. Thus, the site appears to have been unoccupied by owls during the nesting season of 2001. Additionally, all surveys except the last of the 4 protocol surveys were conducted during the peak nesting season (15 April – 15 July). Surveys conducted during this interval are recognized as being more reliable and definitive than those conducted before (1 February – 14 April) or after the peak interval (16 July – 31 August). Therefore, this result comes with a relatively high degree of certainty.

One area (parcel C) that was initially identified as Burrowing Owl habitat was disked between the reconnaissance survey and the first protocol survey. This activity erased any biological clues used to identify Burrowing Owl habitat. For this reason, we will be unable to determine Burrowing Owl status on this portion of the property.

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CALIFORNIA RED-LEGGED FROG SITE ASSESSMENT AND SURVEY REPORT

PATTERSON RANCH PROJECT FREMONT, ALAMEDA COUNTY, CA

PREPARED FOR:

Circle Point 135 Main Street, Suite 1600 San Francisco, CA 94105

PREPARED BY:

Pacific Biology 1212 Colusa Avenue Berkeley, CA 94707 Contact: Josh Phillips 510/527-1008

September 21, 2007

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APPENDICES:

Appendix A. Survey Area Photographs Appendix B. Resumes Appendix C. Data Sheets

1.0 INTRODUCTION

This report presents the methods and results of a site assessment and focused surveys for California red-legged frog (*Rana draytonii*), a federally-listed Threatened species, on the Patterson Ranch Project Site (project site). The site assessment was conducted by Pacific Biology to evaluate the suitability of onsite habitats to support California red-legged frog (CRLF) and the subsequent focused surveys were conducted to determine if the species is present. While suitable habitat for the species is present on the project site, no life stages of CRLF were observed during the surveys.

2.0 PROJECT LOCATION

The 427-acre project site is located in the City of Fremont, Alameda County, California. The project site is bounded to the north by the Alameda Creek flood control channel, to the east by Paseo Padre Parkway, to the south by undeveloped land formerly used as a salt pond, and to the west by Coyote Hills Regional Park. The project site is on the Newark 7.5-minute U.S. Geological Service (USGS) quadrangle (Township 4 South, Range 2 West, Section unassigned). The location of the project site is shown in Figure 1.

3.0 PROJECT DESCRIPTION

The proposed project would develop the 101-acre area east of Ardenwood Boulevard with a variety of housing types, neighborhood parks, and a small commercial area. The approximate 327-acre area west of Ardenwood Boulevard would be reserved for community uses including schools, churches, a community park, and open space land donated to the East Bay Regional Park District, San Francisco Bay National Wildlife Refuge, or other non-profit entity to be determined at a later date.

The conceptual development program consists of the following elements:

- 800 housing units 83 acres (includes streets)
- Neighborhood Commercial 2 acres
- Neighborhood Parks and Trails 16 acres
- Two schools 35 acres

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- Two spiritual facilities 8 acres
- Sewage Pump Station 1 acre
- Community Park 38 acres
- Open Space 245 acres

4.0 METHODS

4.1 Database Search and Literature Review

The latest version of the California Natural Diversity Data Base (CNDDB) was reviewed for the project quad (i.e., Newark) and a 10-mile radius around the project site. The intent of the database review was to determine the closest documented occurrence of CRLF to the project site. Additionally, the *Recovery Plan for the California Red-Legged Frog* (USFWS 2002) and other literature pertaining to the distribution and life history of the CRLF were reviewed.

H.T. Harvey & Associates conducted protocol surveys for CRFL on the Patterson Ranch site in 2000. While a formal survey report was not available for review, the survey findings summarized in the *Patterson Ranch Biological Opportunities and Constraints Analysis* prepared by H.T. Harvey & Associates (April 2004A) were reviewed in preparation of this report. As background information, no life stages of CRLF were observed during the surveys conducted by H.T. Harvey & Associates in 2000.

4.2 Field Surveys

Site Assessment Survey

Mr. Josh Phillips, Principal Biologist of Pacific Biology, conducted a site assessment on April 4 and 5, 2007. The objectives of the site assessment were to (1) describe the upland and aquatic habitats on and near the project site; and (2) identify all areas on the project site containing potentially suitable CRLF aquatic habitat. All aquatic habitats were visually surveyed and characterized. Windshield surveys of surrounding areas were conducted and available aerial photography was reviewed.

Focused Protocol Surveys

Focused surveys were conducted for CRLF consistent with the requirements of the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005). The survey locations included aquatic habitats within Patterson Slough and the K-line and P-line flood control channels; these features are the only potentially suitable CRLF aquatic habitat on the project site (see **Site Assessment Results**). Pursuant to USFWS protocol, a total of eight surveys were conducted, including two day surveys and four night surveys during the breeding season (October 1 through June 30) and one day survey and one night survey during the non-breeding season (July 1 through September 30). The dates and type of surveys (e.g., day, night, breeding season, non-breeding season) conducted are summarized in **Table 1, Survey Schedule**.

Upon arrival at the site, surveyors listened for frogs calling and any audible frog calls were recorded. Visual encounter surveys were then conducted by walking the banks of each of the flood control channels and aquatic habitats within Patterson Slough while repeatedly scanning for frogs. Due to the dense growth of vegetation surrounding the largest ponded area within Patterson Slough (see Site Assessment Results), an inflatable boat was used to survey this

portion of the slough. The boat was maneuvered to allow visual coverage of the entire pond and exposed banks while a second biologist repeatedly scanned for frogs. All species of frogs observed and their life stage (i.e., adult, sub adult, tadpole, egg mass) were recorded. Binoculars were used during all surveys and protocol-approved lights were used during the night surveys. Data sheets were completed for each survey and are included in **Appendix C**.

Josh Phillips and Wendy Dexter, Principal Biologist of Condor Country Consulting, served as the senior biologists for all surveys. Mr. Phillips, with the assistance of a qualified staff biologist, led the surveys of Patterson Slough and the P-line flood control channel, while Ms. Dexter, with the assistance of a staff biologist, led the surveys of the K-line flood control channel. Both Mr. Phillips and Ms. Dexter have successfully identified CRLF in the field, and are very familiar with the distinguishing physical characteristics of all life stages of CRLF, other anurans of California, and with introduced, exotic species such as bullfrog (*Rana catesbeiana*) and African clawed frog (*Xenopus laevis*). The resumes of Mr. Phillips and Ms. Dexter are included in **Appendix B**.

SURVEY #	DATE	Survey Type	SEASON
1	6/5/07	Day	Breeding
2	6/5/07	Night	Breeding
3	6/12/07	Night	Breeding
4	6/19/07	Night	Breeding
5	6/26/07	Day	Breeding
6	6/26/07	Night	Breeding
7	7/3/07	Day	Non-Breeding
8	7/3/07	Night	Non-Breeding

TABLE 1 SURVEY SCHEDULE

5.0 RESULTS

5.1 SITE ASSESSMENT RESULTS

General CRLF Life History

The California red-legged frog (CRLF) occurs from sea level to elevations of 1,500 meters (5,200 feet). Breeding occurs in streams, deep pools, backwaters within streams and creeks, ponds, marshes, sag ponds, dune ponds, lagoons, and stock ponds. Breeding adults are often associated with deep (greater than 0.7 meter [2 feet]) still or slow moving water and dense, shrubby riparian or emergent vegetation (Hayes and Jennings 1988), but frogs have been observed in shallow sections of streams and ponds that are devoid of vegetative cover. The CRLF also utilizes non-aquatic habitats for refuge and dispersal. The species is known to rest and feed in riparian vegetation and it is believed that the moisture and cover of the riparian zone provides foraging habitat and facilitates dispersal. The species has also been documented dispersing through areas with sparse vegetative cover and dispersal patterns are considered to be dependent on habitat availability and environmental conditions (N. Scott and G. Rathbun *in litt.* 1998).

General Biological Setting

Patterson Ranch has been maintained in agricultural production for over 50 years. During this period, the entire site (excluding Patterson Slough and the two flood control channels) has been farmed with the soil planted and tilled one or more times per year. Patterson Slough meanders in a northwesterly direction across the central portion of the property and two flood control channels (K-line and P-line, respectively) bisect the northern and southern portions of the property. The Alameda County Flood Control Channel (Alameda Creek) is separated from the northwest boundary of the site by a paved bike path constructed on top of the upper eastern bank of the channel. The project site supports three habitat types, including agricultural fields, mixed riparian forest (associated with Patterson Slough), and aquatic freshwater emergent marsh (associated with flood control channels). Coyote Hills Regional Park generally borders the project site to the west.

Potentially Suitable Onsite CRLF Habitat

Potentially suitable aquatic habitat for CRLF on the project site occurs in portions of Patterson Slough and within the K-line and P-line flood control channels. These areas are discussed below and their locations are shown in **Figure 2**.

Patterson Slough

Patterson Slough meanders in a northwesterly direction across the central portion of the property. In the early 1980's, the Demonstration Urban Storm Water Treatment (DUST) Marsh was constructed on the adjacent Coyote Hills Regional Park property (which is located downstream and immediately to the west of Patterson Slough). Establishment of the marsh included the construction of an earthen berm approximately 300 feet downstream (west) of the Patterson Ranch property (MacKay & Somps 1999). The berm essentially prevents outflow from Patterson Slough. However, during storm events water within the slough may reach adequate height to spillover the berm into the adjacent marsh. Following construction of the berm, the East Bay Regional Park District installed a pump at the downstream reach of Patterson Slough to keep water levels in the slough low enough to prevent lateral overflow into adjacent fields and to allow runoff from the fields to drain into the slough (H.T. Harvey & Associates 2004B).

Patterson Slough currently supports a multilayered tree canopy composed of arroyo willow (Salix lasiolepis), coast live oak (Quercus agrifolia), and western sycamore (Platanus racemosa). The understory vegetation is very dense and is dominated by poison oak (Toxicodendron diversilobum), California blackberry (Rubus ursinus), and coyote brush (Baccharis pilularis). The dense understory makes access to portions of the slough difficult.

Large portions of the slough were dry and/or choked with cattails (*Typha latifolia*) at the time of the site assessment (April 4-5, 2007) and the onset of protocol surveys (June 5, 2007). However, four areas of ponded water providing potentially suitable habitat for CRLF were identified within the slough; these areas are discussed below.

Pond 1 is located in the central portion of the slough and is the largest body of standing water present within the slough. The pond is approximately 400 feet by 200 feet in size and 2 to 2.5 feet in depth. The pond is bisected east to west by cattails (essentially dividing the pond into two segments) and is generally bordered to the north and south by cattails and to the east and west by mixed riparian woodland and dirt banks. The pond is perennial and its water level did not greatly fluctuate during the course of the surveys. The pond provides characteristics associated with suitable CRLF breeding habitat. Specifically, it contains relatively deep open water habitats, emergent vegetation providing cover habitat, overhanging riparian vegetation, and suitable adjacent upland areas (including riparian habitat). Photographs of Pond 1 are included in **Appendix A** (see Photos 1-4).

Pond 2 is located immediately to the northwest of Pond 1. The pond is approximately 15 feet by 15 feet in size and 1.5 feet deep. Given that the surface the pond was completely covered by aquatic vegetation and that the pond appeared to be anaerobic, it provides marginal CRLF habitat. The pond is perennial and its water level did not greatly fluctuate during the course of the surveys. Photographs of Pond 2 are included in **Appendix A** (see Photo 5).

Pond 3 is located to the south of Pond 1. The pond is approximately 25 feet by 20 feet in size and 1 to 1.5 feet deep. Willows provide cover over portions of the pond while dirt banks are also present. The pond provides potentially suitable CRLF habitat, but is shallower than aquatic habitat generally used for breeding by the species. The pond is perennial and its water level did not greatly fluctuate during the course of the surveys. Photographs of Pond 3 are included in Appendix A (see Photos 5-6).

Pond 4 is located to the southeast of Pond 3. The pond is approximately 30 feet by 15 feet in size and approximately 1 foot deep. The bottom of the pond is lined with leaf

litter (approximately 1 foot deep) and the pond appears to be anaerobic. Given the above, the pond is considered to provide marginal CRLF habitat. The pond is perennial and its water level did not greatly fluctuate during the course of the surveys. Photographs of Pond 4 are included in **Appendix A** (see Photo 7).

K-Line Flood Control Channel

The K-line flood control channel (formerly Crandall Creek) crosses the northern portion of the project site. The K-line has been channelized and has earthen banks within the project boundaries and concrete banks to the east (upstream) of the site. The K-line eventually drains to the Alameda Creek Flood Control Channel (which is further discussed below).

The K-line channel has an average width of approximately 7 feet and ranges in depth from approximately 1.5 to 3 feet. Cattails and bulrush (*Scirpus acutus*) occur in varying densities along the channel and the banks have been planted with a non-native bunch grass (likely to provide bank stabilization). The channel runs through urban areas (east of the site) and trash and brown scum were frequently observed. Vegetation within the channel is periodically sprayed by the Alameda County Water District to improve flow conditions (H.T. Harvey & Associates 2004B).

The K-line channel provides potentially suitable CRLF habitat given the depth and persistence of water and available vegetative cover. However, several factors detract from the suitability of the habitat including periodic vegetation removal, the lack of suitable upland areas to escape high water flows (the channel is bordered by agricultural fields and access roads within the project boundaries), and potentially degraded water quality. Photographs of the K-line channel are included in **Appendix A** (see Photos 9-10).

P-Line Flood Control Channel

The P-line flood control channel crosses the southern portion of the project site. The P-line has earthen banks within the project boundaries and eventually drains to DUST Marsh. Within the project boundaries, the P-line has an average width of approximately 10 feet and ranges in depth from approximately 1 to 2 feet. The water level gets progressively shallower moving east to west along the drainage. Cattails and bulrush dominate the lower margins of the drainage while non-native grasses and weedy species occur higher on the creek banks. Vegetation within the channel is periodically removed to improve flow conditions (H.T. Harvey & Associates 2004B).

The P-line channel provides potentially suitable CRLF habitat given the persistence of water and available vegetative cover. However, several factors detract from the suitability of the habitat including relatively shallow depth along most of the drainage, periodic vegetation removal, the lack of suitable upland areas to escape high flows (the channel is bordered by agricultural fields and access roads within the project boundaries), potentially degraded water quality, and abundant carp (a known predator of CRLF). Photographs of the P-line channel are included in **Appendix** A (see photos 11-12).

Potentially Suitable Offsite CRLF Habitat

The Alameda County Flood Control Channel (Alameda Creek) is separated from the northwest boundary of the site by a paved bike path constructed on top of the upper eastern bank of the channel. The drainage contains large meandering channels, open water habitats, and emergent vegetation. Given the presence of these features, the drainage provides potentially suitable CRLF habitat. Alameda Creek drains directly to the Bay and is tidally influenced. Salinity levels in the reach of the creek near the project site are low enough to allow the establishment of freshwater associated vegetation such as cattails.

DUST Marsh occurs on Coyote Hills Regional Park and is located immediately to the west of the project site. The marsh is hyrdologically connected to the P-line channel, but is separated from Patterson Slough by a constructed berm. The marsh contains features associated with suitable CRLF habitat including extensive open freshwater habitats, large patches of emergent vegetation, and adjacent grassland uplands. Based on information provided by the East Bay Regional Park District, the marsh contains a large bullfrog population (a known CRLF predator) and CRLF have never been documented at the marsh.¹

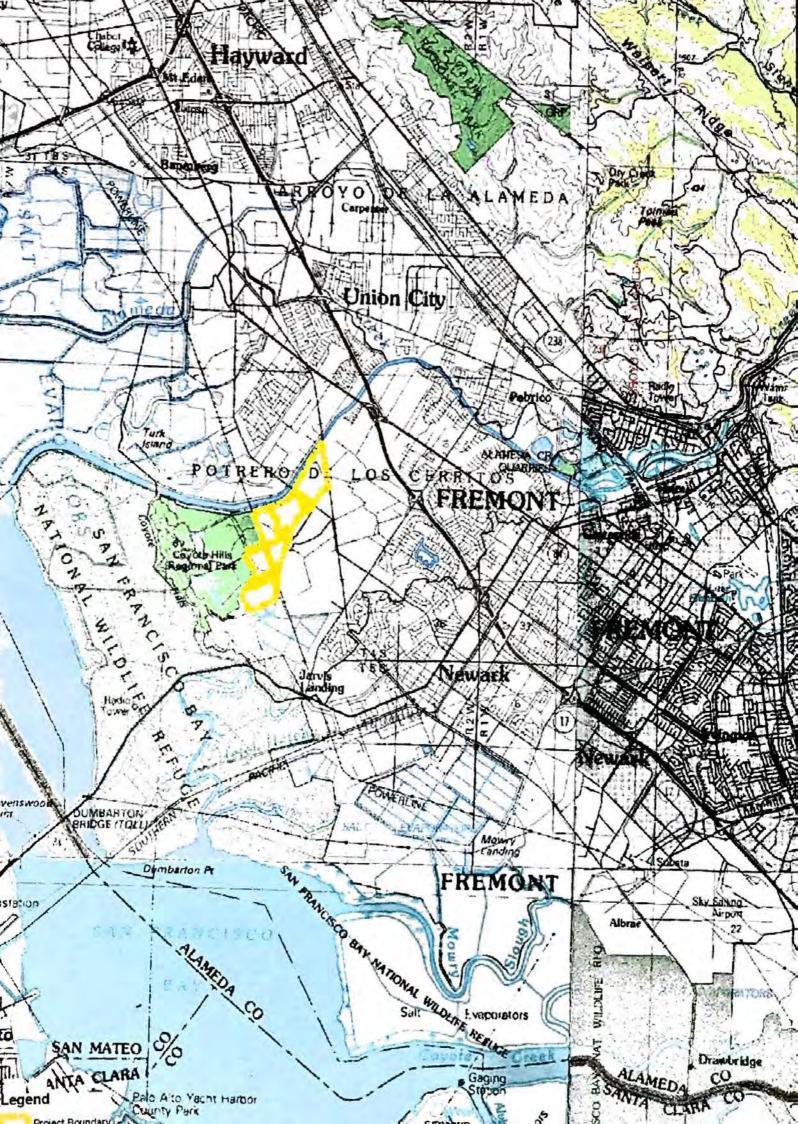
Alameda Creek and Dust Marsh were not included in the survey area for the following reasons: (1) they are not located on the project site and would not be directly impacted by the proposed development; and (2) they are very large in size, contain a matrix of habitats, and would require a substantial effort to thoroughly survey.

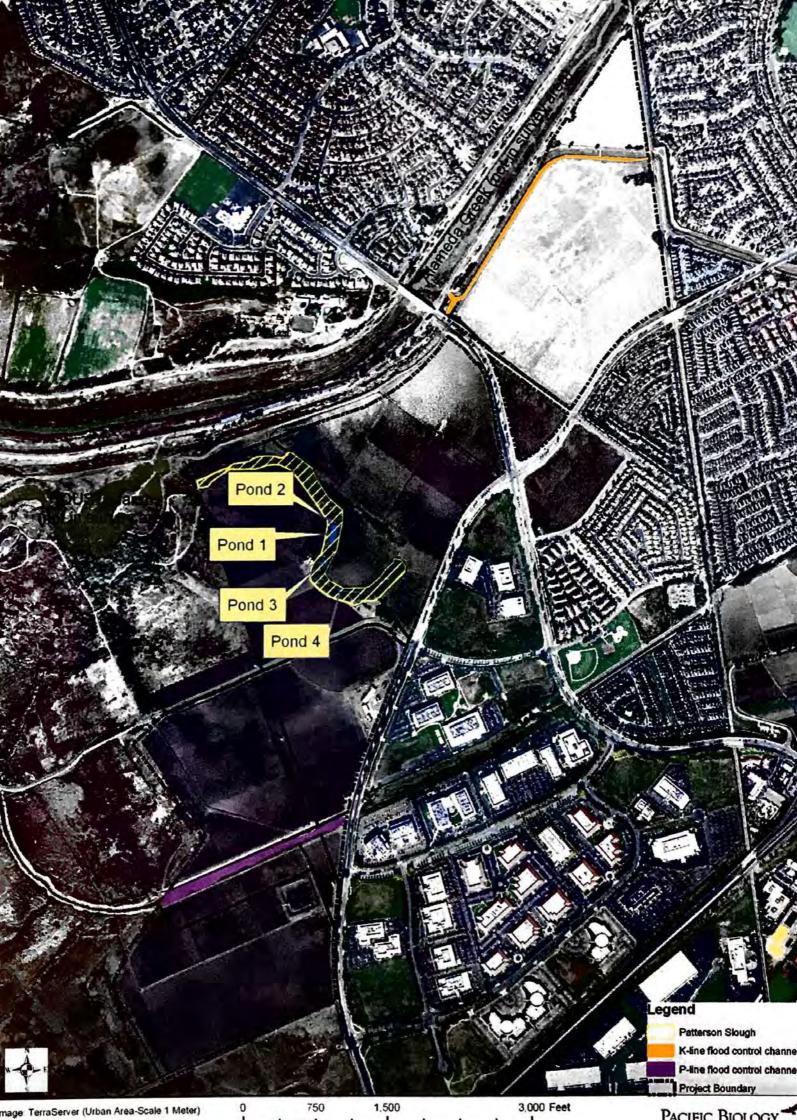
Documented CRLF Occurrences in Project Region

Contra Costa and Alameda Counties contain the majority of known CRLF localities within the San Francisco Bay area, although the species seems to have been nearly eliminated from the western lowland portions of these counties (west of Highway 80 and Highway 580), particularly near urbanization (USFWS 2002). California red-legged frogs still occur in small isolated populations in the East Bay foothills (between Highway 580 and Highway 680) and are thriving in several areas in the eastern portions of Alameda and Contra Costa Counties (USFWS 2002).

The project site is located in the western lowland portion of Alameda County; as described above, CRLF appear to have been nearly eliminated from this portion of the County. According to the CNDDB, the closest documented occurrence of CRLF to the project site is approximately 3.8 miles northeast of the site. This occurrence (Occurrence #305) was reported in 1999 from an unnamed dirt-lined canal near the intersection of Highway 238 and Seventh Street in Union City. As shown in **Figure 3**, this occurrence is separated from the project site by urban development and does not have a direct hydrologic connection to the site. To access the site from the location, a frog would need to disperse approximately 0.7 mile through urban/industrial areas to reach aquatic habitat hydrologically connected to the project site (i.e., Alameda Creek). As also shown in **Figure 3**, other known CRLF occurrences in the project area are located in the undeveloped foothills east of Union City and are separated from the project site by urban development.

June 13, 2007. Personal communication with Joe Didonato, Wildlife Supervisor, East Bay Regional Park District.





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egend CRLF (CNDDB) Project Boundary 0 1 2 4 Miles

Figure 3: Closest Documented CRLF Occurrrences

Image: TerraServer (Urban Area-Scale 16 Meter)

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5.2 RESULTS OF FOCUSED PROTOCOL SURVEYS

As described previously, potentially suitable aquatic habitat for CRLF on the project site is limited to four ponded areas within Patterson Slough and the K-line and P-line flood control channels. Accordingly, these areas were surveyed as described in Section 4, Methods.

No CRLF (including adults, subadults, tadpoles, or egg masses) were observed during the eight surveys of Patterson Slough and the K-line and P-line flood control channels. Overall amphibian diversity was observed to be low within the survey area. Specifically, only several adult Pacific tree frogs (*Hyla regilla*) were observed in Pond 1 of Patterson Slough; no other amphibians were observed in Patterson Slough. Several bullfrogs and Pacific tree frogs were observed in the K-line channel and no amphibians were observed in the P-line channel.

No aquatic predators of CRLF were observed within Patterson Slough. However, hundreds of crayfish burrows were observed within the K-line and P-line channels and carp were abundant in the P-line channel (with as many as 10 large carp observed during a single survey). The highest density of carp was observed within the eastern portion of the P-line channel (near the culvert), but large fish occurred throughout all portions of the channel with adequate water depth. A large red-eared slider (*Chrysemys scripta*) turtle was observed on several occasions within the K-line channel.

All of the water features surveyed maintained standing water and did not substantially decrease in depth throughout the surveys. The data forms completed for the eight surveys of Patterson Slough and the K-line and P-line flood control channels are included in **Appendix C**.

6.0 CONCLUSIONS AND DISCUSSION

No life stages of CRLF were observed on the project site during the current surveys or during previous surveys conducted by H.T. Harvey & Associates in 2000. Given these negative survey findings, and that CRLF has not been documented in areas where the species could disperse onto the site, CRLF is not expected to occur on the project site.

Amphibian occurrence within Patterson Slough was conspicuously low with only several Pacific tree frogs being observed. Bullfrogs are known to occur in Dust Marsh (which is separated from Patterson Slough by a dirt berm), but the species has not colonized Patterson Slough. Potential explanations for the absence of bullfrogs from Patterson Slough may include (1) degraded water quality from past/ongoing agricultural uses of the adjacent fields could limit prey for bullfrogs; and/or (2) prey abundance and habitat conditions for bullfrogs are much more favorable at DUST Marsh. The high abundance of large carp with the P-line channel may explain the lack of any amphibian observations within that drainage.

The surveys were conducted during a period of below average rainfall. Nonetheless, it is considered unlikely that more abundant rainfall would have altered the survey findings for the following reasons: (1) Patterson Slough appears to be fed by groundwater and maintained adequate water depth throughout the surveys; and (2) the K-line and P-line flood control channels are fed by urban runoff and maintained adequate water depth throughout the surveys.

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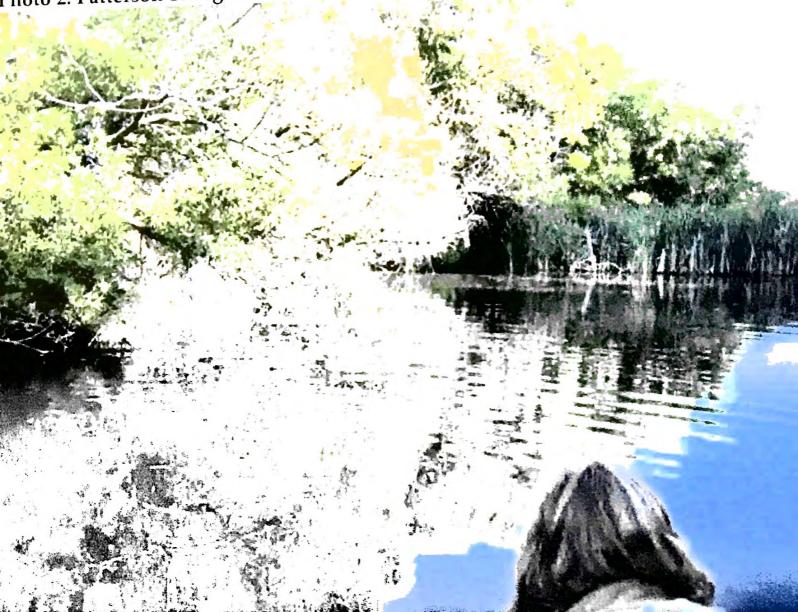
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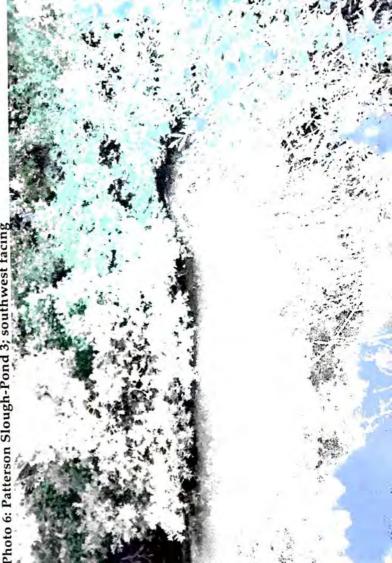
Photo 2: Patterson Slough-Pond 1; southeast facing

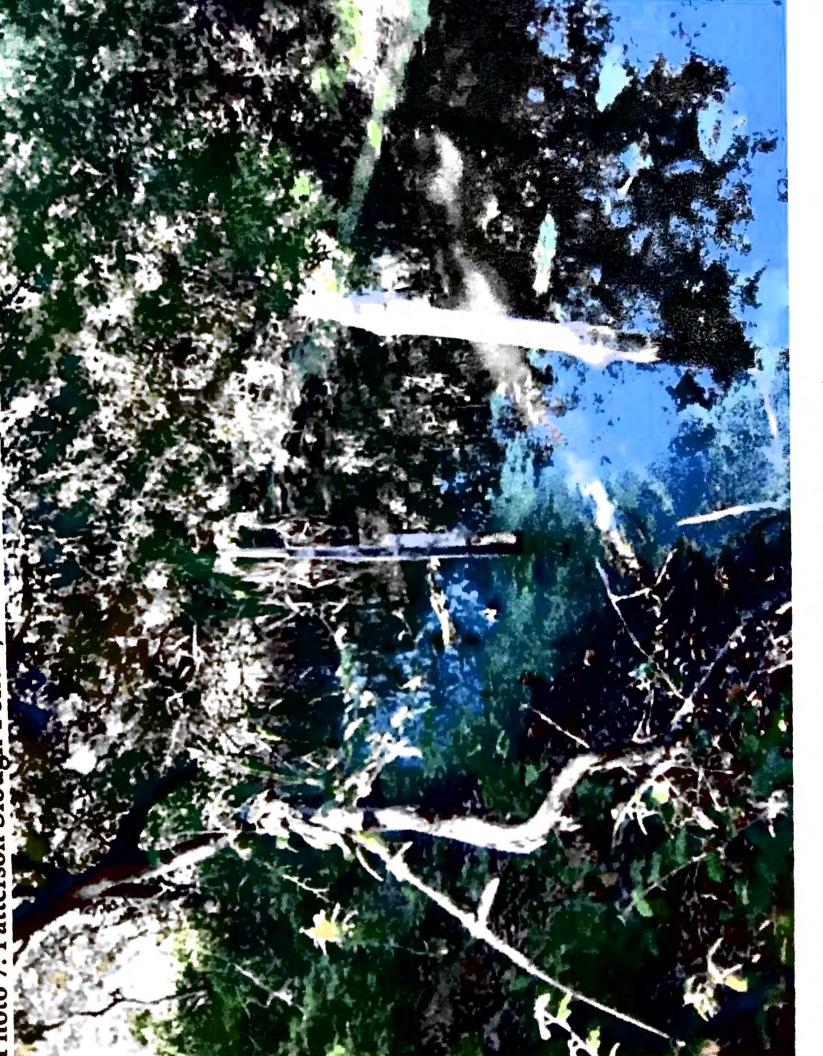






south 6: Patterson Slough-Pond 3





al + ed chok ea ar L D no S



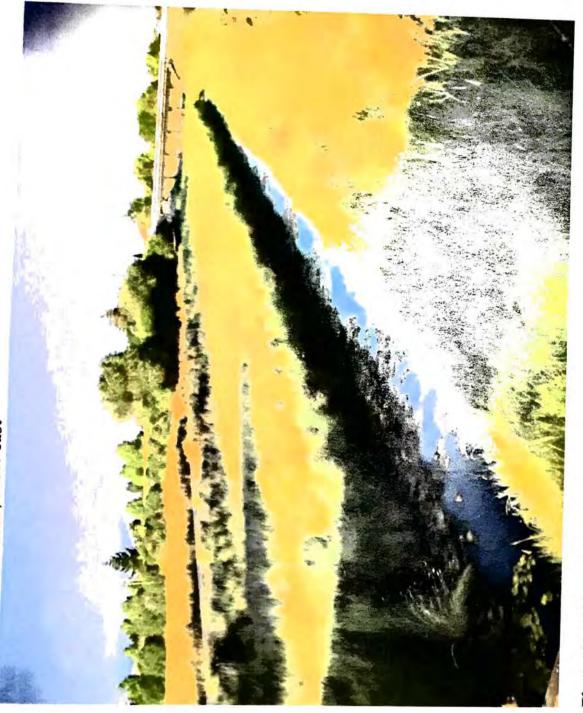


Photo 10: K-line channel; view west





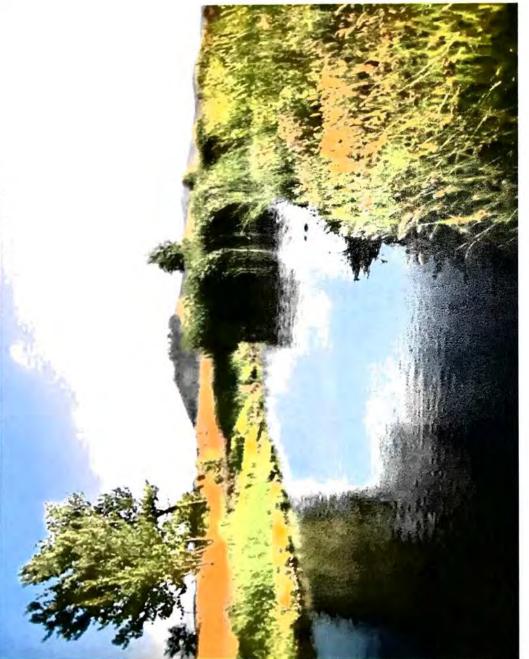


Photo 12: P-line channel; view west, western portion of channel



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July 28, 2016

Mr. Jeff Peters, Principal Questa Engineering Corporation 1220 Brickyard Cove Rd., Ste. 206 Richmond, CA 94801

This letter provides my findings for the Ardenwood wetland mitigation site located off of Paseo Padre Parkway in Fremont, Alameda County, CA. The purpose of the site visit, which was conducted on June 24, 2016, was to determine if any of the special status plants species identified as potentially occurring on the site were present. The list of potentially occur special status plant species was based on the *Biological Resources Assessment Report* (BRA) *for the Ardenwood Creek Flood Protection and Restoration Project*, Fremont, Alameda County, California prepared for Alameda County Flood Control and Water Conservation District by WRA dated October 2013.

Background:

Based upon a review of the resources and databases (WRA 2013), 41 special-status plant species have been documented in the vicinity of the study area. However, only 8 of these species have the potential to occur based on the presence of potential habitat. These are: alkali milk-vetch (*Astragalus tener* var. *tener*), San Joaquin spearscale (*Extriplex joaquinana*), lesser saltscale (*Atriplex minuscula*), Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Hoover's button celery (*Eryngium aristulatum* var. *hooveri*), prostrate navarretia (*Navarretia prostrata*), hairless popcornflower (*Plagiobothrys glaber*), and saline clover (*Trifolium hydrophilum*). There is no coastal salt marsh habitat within the study area so those species associated with that habitat type are not expected to occur and none were observed.

Methods:

The study area is approximately 78-acres located south of Ardenwood Creek (Line P in District Zone 5) and west of Paseo Padre Parkway (Figure 1). The entire site was walked using transects from north to south and south to north. The site was walked by Jane Valerius, botanist, and Hannah Cutts, biologist on June 24, 2016. A list of species observed was recorded and is provided in Table 1. The timing of the plant survey was within the flowering period for most of the potential plants cited above. The survey protocol followed the California Department of Fish & Wildlife requirements that surveys for special status plants be conducted at the time of year when those species are most identifiable, which is typically when they are in flower.

Results:

Two special status plants were found during the June 24, 2016 survey. These are pappose tarplant (*Centromadia parryi* ssp. *parryi*), a CNPS Rank 1B species; and crownscale (*Atriplex coronata* ssp. *coronata*), a CNPS Rank 4 species. There is also a common species of *Centromadia* on the site which is common tarweed (*Centromadia pungens*) and also a common species of *Atriplex* which is fat hen (*Atriplex prostrata*). Common tarweed is a native plant species and fat hen is a non-native species.

The site is dominated by non-native and weedy species (Table 1). The site had been grazed by goats prior to the site visit. Native plants observed, that are not special status, include alkali heath (*Frankenia salina*), seaside heliotrope (*Heliotropum curassavicum* var. *oculatum*), hedge nettle (*Stachys ajugoides*), and inland saltgrass (*Distichlis spicata*). Many of the plants found on the site are associated with alkaline soils.

Table 1: List of plant species observed during survey.

Scientific Name	Common Name
Atriplex coronata var. coronata	Crownscale – a CNPS Rank 4 species
Atriplex prostrata	Fat hen
Avena barbata	Wild oats*
Avena fatua	Oats*
Brassica niga	Black mustard*
Bromus diandrus	Ripgut brome*
Bromus hordaceus	Soft chess*
Carduus pycnocpehalus	Italian thistle*
Centromadia parryi ssp. parryi	Pappose tarplant – a CNPS Rank 1B species
Centromadia pungens	Common tarweed; common spikeweed
Chenopodium sp.	Goosefoot*
Cirsium vulgare	Bull thistle*
Convolvulus arvensis	Bindweed*
Cynodon dactylon	Bermuda grass*
Distichlis spicata	Saltgrass
Dittrichia graveolens	Stinkwort*
Festuca perennis	Ryegrass*
Frankenia salina	Alkali heath
Heliotropum curassavicum var. oculatum	Seaside heliotrope
Helminthotheca echioides	Bristly ox-tongue*
Hirschfeldia incana	Short podded mustard*
Hordeum marinum ssp. gussoneanum	Mediterranena barley*
Hordeum murinum ssp. leporinum	Hare barley*
Lactuca serriola	Pricky lettuce*
Lepidium latifolium	Perennial pepperweed*
Lotus corniculatus	Bird's-foot trefoil*
Lythrum hyssopifolia	Hyssop loose strife*
Malvella leprosa	Alkali mallow*
Malvia nicaeensis	Bull mallow*
Medicago polymorpha	Bur clover*
Phalaris aquatica	Harding grass*
Polypogon monspeliensis	Rabbitsfoot grass*
Quercus agrifolia	Coast live oak
Raphanus sativus	Wild radish*
Salsola soda	Alkali Russian thistle*
Spergularia bocconi	Bocone's sand spurry*
Spergularia rubra	Red sandspurry*
Stachys ajugoides	Hedge nettle
Vicia sativa	Spring vetch*
Xanthium strumarium	Cocklebur*

Plants with an * are non-native species.

EAST BAY REGIONAL PARK DISTRICT

RESOLUTION NO.: 2019 - 09 - 225

September 3, 2019

AUTHORIZE THE CERTIFICATION OF THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT; ADOPT FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, A STATEMENT OF OVERRIDING CONSIDERATIONS, AND A MITIGATION MONITORING AND REPORTING PROGRAM; AND APPROVE THE LAND USE PLAN AMENDMENT: COYOTE HILLS REGIONAL PARK

WHEREAS, Coyote Hills Regional Park was opened to the public by the East Bay Regional Park District (Park District) in 1968; and

WHEREAS, the Park District added 306 acres of land to the Park through acquisitions in 2014 (Resolution No. 2014-06-141) and 2016 (Resolution No. 2016-09-242); and

WHEREAS, the adopted 2005 Coyote Hills Regional Park Land Use Plan includes policies that envision future park improvements extending east from the current Park boundary towards Paseo Padre Parkway; and

WHEREAS, on January 10, 2017, by Resolution No. 2017-01-013, the Park District Board of Directors approved a contract for professional services and directed staff to pursue developing public access and habitat restoration, and add the Patterson Donation and Church Parcel lands to the park; and

WHEREAS, on February 20, 2018, by Resolution 2018-02-029, the Board of Directors, after a series of public planning workshops and Board Executive Committee meetings, approved a conceptual site plan and site program and directed staff to proceed with amending the Coyote Hills Regional Park Land Use Plan to add 306 acres to the park and analyze environmental effects of the under the CEQA; and

WHEREAS, a Notice of Preparation of an Environmental Impact Report (EIR) was published for the project on May 14, 2018. The 30-day Notice of Preparation comment period closed on June 18, 2018 and the Park District conducted a public scoping meeting on May 31, 2018. The comments received during the public comment period and at the public scoping meeting were utilized to focus impact analysis and develop the list of Project alternatives considered in the Draft EIR; and

WHEREAS, on March 7, 2019, the Park District issued a Notice of Availability (NOA) of the Draft EIR for the project to the California Governor's Office of Planning and Research, responsible and trustee agencies, and the public – initiating the public review period; and WHEREAS, the Final EIR consists of the March 2019 Draft EIR and the Response to Comments document, which contains copies of all written and verbal comments received during the 45-day comment period, a list of commenters, all responses to written and verbal comments, minor changes made to the Draft EIR to clarify text in response to comments, and the Mitigation Monitoring and Reporting Program (MMRP); and

WHEREAS, the Final EIR was published and made available to the public and interested parties on July 17, 2019; and

WHEREAS, On July 22, 2019, the Parks Advisory Committee reviewed the LUPA and Final EIR and recommended its consideration by the full Board; and

WHEREAS, On August I, 2019, the Park District's Board Executive Committee reviewed the LUPA and Final EIR and recommended its consideration by the full Board; and

WHEREAS, the Final EIR provides an evaluation of the potential for the proposed project to result in significant environmental impacts, recommends mitigation measures to address those potential impacts, and concludes that each of the potentially significant effects of the project are mitigated to a less-than-significant level with the exception of the significant and unavoidable impact to historic resources from the removal of the contractors residence building on the north side of Patterson Ranch Road, for which the Board will adopt a Statement of Overriding Considerations; and

WHEREAS, the MMRP consists of mitigation measures recommended in the EIR for the project and mitigation and monitoring requirements, and has been completed in compliance with the California Environmental Quality Act (CEQA); and

WHEREAS, feasible alternatives to the proposed project have been analyzed, and it has been determined that none of the alternatives is feasible nor desirable; and

WHEREAS, the MMRP and the Findings Report were distributed to the Park District's Board of Directors on August 29, 2019, who reviewed and considered the information contained in these CEQA components prior to approving the project; and

WHEREAS, on September 3, 2019, the Board held a duly noticed public hearing to consider the Final EIR; and

WHEREAS, the Park District is the custodian of the documents and other material that constitute the record of the proceedings upon which its decision is made at its administrative office located at 2950 Peralta Oaks Court, Oakland, California, 94605;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the East Bay Regional Park District hereby certifies that the Environmental Impact Report (SCH#2018062002) for the Coyote Hills Restoration and Public Access Project is complete, and that it has been prepared, circulated and reviewed pursuant to applicable law and, together with the Board materials of September 3, 2019, constitutes an adequate, accurate, objective and complete EIR in accordance with CEQA and its Guidelines, and reflects the Park District's independent judgement and analysis, and was presented to the Board of Directors that reviewed and considered the information in the Final EIR and public testimony and all comments received in this proceeding prior to taking action on the project; and

BE IT FURTHER RESOLVED, that the Board of Directors adopts the CEQA Findings of Fact and Statement of Overriding Considerations, attached hereto as Exhibit A; and

BE IT FURTHER RESOLVED, that the Board of Directors adopts all identified feasible mitigation measures and the Mitigation, Monitoring, and Reporting Program, attached hereto as Exhibit B; and in order to further mitigate already insignificant impacts, the Mitigation, Monitoring and Recording (MMR) program attached hereto as Exhibit B shall be amended as follows:

The existing mitigation measure Bio-IC shall be amended to add "to the extent practicable existing native grasses involved within the areas to be disturbed by construction will be salvaged and used for grassland mitigation and existing native grasses, forbs and bulbs in the planned grassland mitigation areas will be marked for protection and retained. Seed for mitigation shall be sourced from locations within Alameda and Contra Costa Counties with similar environmental conditions to the extent practicable. District staff shall consult with California Native Plant Society (CNPS) on plant selection." In addition, a new mitigation measure shall be added that provides that "the trails shall be subject to seasonal closures as necessary to protect natural habitat."

BE IT FURTHER RESOLVED that the Board of Directors approves the Coyote Hills Regional Park Land Use Plan Amendment (LUPA) with the following changes:

The LUPA is amended to provide that any proposed viewing platform shall be located at a minimum of 100 feet from the edge of Patterson Slough. The second amendment to the LUPA shall be that the Oak Trail viewing platform and the Oak Spur Trail shall be removed from the Land Use Plan and, as a part of final design, staff shall consider the removal of the Patterson Slough Overlook.

BE IT FURTHER RESOLVED the Board of Directors, directs staff to, as part of the final design, shift the proposed parking lot further west and south to create a larger buffer from the Slough all within the footprint analyzed within the EIR.

BE IT FURTHER RESOLVED, that the Board of Directors approves the Coyote Hills Regional Park LUPA; and

BE IT FURTHER RESOLVED, that there is sufficient funding to cover the cost of the filing fees in the Improve Access and Habitat Project (No. 154800); and

BE IT FURTHER RESOLVED that the General Manager is hereby authorized and directed, on behalf of the District and in its name, to execute and deliver such documents and to do such acts as may be deemed necessary or appropriate to accomplish the intentions of this resolution.

Moved by Director Rosario, seconded by Director Wieskamp, and adopted this 3rd day of September, 2019 by the following vote:

FOR: Ellen Corbett, Whitney Dotson, Beverly Lane, Dee Rosario, Ayn Wieskamp.

AGAINST:None.ABSTAIN:None.ABSENT:Colin Coffey, Dennis Waespi.

Board President

CERTIFICATION I, Yolande Barial Knight, Clerk of the Board of Directors of the East Bay Regional Park District, do hereby certify that the above and foregoing is a full, true and correct copy of Resolution No 2019 -09 -225 dopted by the Board of Directors at a regular meeting held 10 Davia Ke on Sectember

EXHIBIT A

SCH # 2018062002 September 3, 2019

CEQA FINDINGS OF FACTS

Coyote Hills Restoration and

Public Access Project

Lead Agency: East Bay Regional Park District

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Chapter 1 Introduction

The following findings are hereby adopted by the East Bay Regional Park District (EBRPD or Park District) Board of Directors ("Board") for the Coyote Hills Restoration and Public Access Project at Coyote Hills Regional Park ("Project") in accordance with the California Environmental Quality Act ("CEQA"), Public Resources Code sections 21081, 21081.5, and 21081.6, and *CEQA Guidelines*, Title 14, California Code of Regulations sections 15091 through 15093. These findings summarize the environmental analysis and conclusions of the July 17, 2019 Final Environmental Impact Report, which included the March 2019 Draft EIR, the Response to Comments on the Draft EIR, and the Mitigation, Monitoring and Reporting Program ("MMRP") (collectively referred to herein as "the Final EIR").

The EBRPD Board of Directors certified the EIR and adopted the MMRP following a public hearing on September 3, 2019. As stated in the adopted resolution, the EBRPD Board of Directors certified the EIR, which included analysis of environmental impacts, recommended mitigation measures, and conclusions regarding the Projects environmental impacts. The mitigation measures described in the Draft EIR reduced all but one of the potentially significant impacts to less-than-significant levels; however, in some instances mitigation measures were revised in the Final EIR to provide clarification and to further mitigate the identified impacts. In accordance with Public Resources Code Section 21081 and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, the Park District as the decision-making agency is required to balance, as applicable, the benefits of the Project against its unavoidable environmental risks when determining whether to approve the Project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered "acceptable," in which case the lead agency must adopt a formal statement of overriding considerations. The Final EIR identified one significant and unavoidable impact associated with historic resources. Thus, a statement of overriding considerations is required and provided herein.

These findings summarize the environmental determinations of the Final EIR about Project impacts before and after mitigation, and do not attempt to repeat the full analysis of each environmental impact contained in the Final EIR. Instead, these findings provide a summary description of and basis for each impact in the Final EIR, describe the applicable mitigation measures identified in the Final EIR, and state the Park District's findings regarding the significance of each impact after implementation of the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the Final EIR, and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the Final EIR's determinations regarding mitigation measures and the Project's impacts.

In adopting mitigation measures below, the Park District Board intends to adopt each of the mitigation measures identified in the Final EIR. Accordingly, in the event a mitigation measure identified in the Final EIR has been inadvertently omitted from these findings, such mitigation measure is hereby referred to, adopted, and incorporated in the findings below by reference. In addition, in the event the language of a mitigation measure set forth below fails to accurately reflect the mitigation measure in the Final EIR due to a clerical error, the language of the mitigation measure as set forth in the Final EIR shall control unless the language of the mitigation measure has been specifically and expressly modified by these findings.

Chapter 2 Planning and Environmental Review Process

The proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan. The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and development of the Expansion area proposed in this Project. The Project will include habitat restoration and enhancement, recreation and visitor serving facilities, public access trail construction and operation, cultural resources management, agricultural land uses, surface water and groundwater management, utility upgrades and extensions and measures to address and adapt to climate change and sea level rise.

The history of EBRPD's planning and environmental review process for the Project is set forth in detail in the Final EIR, and summarized below. The environmental review for the Project included substantial opportunity for public comment, including the following public meetings:

- (i) Park District Board Executive Committee, July 6, 2017 (Review of Site Constraints and Opportunities)
- (ii) Public Workshop #1, August 14, 2017 (Review of Site Constraints and Opportunities)
- (iii) Park District Board Executive Committee, November 2, 2017 (Review of Draft Program Options)
- (iv) Public Workshop #2, November 13, 2017 (Review of Draft Program Options)

- (v) Park District Board of Directors, February 20, 2018 (Approval of Conceptual Site Plan and Site Program)
- (vi) CEQA Notice of Preparation Scoping Meeting, May 31, 2018
- (vii) Native American Consultation (AB 52) April 26, 2018
- (viii) July 22, 2019: The Park District Parks Advisory Committee provided and received public comments on the project at its regularly scheduled public meeting;
- (ix) August 1, 2019: The Park District Board of Directors Executive Committee received public comments on the Project and EIR at its regularly scheduled public meeting;
- (x) September 3, 3019: The Park District Board of Directors held a public hearing and received public comments on the Final EIR and proposed Project.

The Park District published a Notice of Preparation of an EIR on May 14, 2018. The 30-day public comment period closed on Jun 18, 2018 and the Park District conducted a public scoping meeting on May 31, 2018. The comments received during the public comment period and at the public scoping meeting were utilized to focus impact analysis and develop the list of Project alternatives considered in the Draft EIR.

The Park District published a Notice of Availability of the Draft EIR on March 7, 2019. The 45-day public comment period was set to close on April 22, 2019. A total of 13 comment letters were received on the Draft EIR.

The Final EIR was made available to the public and provided to the Board on July 17, 2019. The Final EIR consists of the March 2019 Draft EIR and the Response to Comments document, which contains copies of all written and verbal comments received during the 45-day comment period, a list of commenters, all responses to written and verbal comments, minor changes made to the Draft EIR to clarify text in response to comments, and the MMRP. The analysis and conclusions contained in the Final EIR reflect the independent judgment of EBRPD. The Board of Directors reviewed and considered the information contained in the Final EIR prior to acting on the Project.

On August 3, 2019, the Board Executive Committee voted unanimously to forward a recommendation to the Board of Directors to certify the Environmental Impact Report for the Coyote Hills Restoration and Public Access Project at Coyote Hills Regional Park; adopt the Mitigation, Monitoring, and Reporting Program; and approve the Project as proposed.

Throughout the EIR process, public documents have been made available at local libraries, the Park District's Coyote Hills Regional Park webpage, and at the Park District's Administrative Office. Information about the proposed Project and the EIR has also been provided on the Coyote Hills Regional Park Facebook page.

Chapter 3 Effects found not to be Significant

Through project scoping, the Initial Study, and the environmental analysis contained within the Final EIR, it was determined that the Project would not result in a potentially significant effect, or would have a less than significant effect on the environment with respect to: agricultural and forest resources; greenhouse gas emissions and climate change; land use and planning; mineral resources; population and housing; and public services. No further findings are required for these subject areas. The following issues were found to have less-than-significant or no impacts by the Initial Study and were not analyzed further in this EIR.

- Agriculture and Forest Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services

Chapter 4Findings on Potentially Significant Environmental Impacts
of the Project that are Reduced to a Level of "Less Than
Significant" by the Mitigation Measures Adopted for the
Project and Facts in Support of Findings

The Final EIR identifies the following potentially significant impacts associated with the Plan, which are reduced to a "less-than-significant" level by mitigation measures identified in the Final EIR. It is hereby determined that the potentially significant environmental impacts which these mitigation measures address will be mitigated to a less-than-significant level by incorporation of the mitigation measures into the Project.

The impacts and related mitigation measures identified below are presented in summary form. For a detailed description of impacts and mitigation measures, see the appropriate text in the Final EIR.

AIR QUALITY

Potential Impact

Impact AIR-1: Project implementation could result in construction dust emissions.

Mitigation Measure

(i) Mitigation Measure AIR-1: The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Park District's phone number shall also be visible to ensure compliance with applicable regulations.

The following measures, contained in Table 8-3 of the Bay Area Air Quality Management District's May 2017 California Environmental Quality Act Guidelines, also shall be included in the Project construction dust/emission control plan:

- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

- Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimizing the idling time of diesel powered construction equipment to two minutes.
- The Project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a Project wide fleet-average 20 percent NO_X reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.
- Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Finding

Implementation of the mitigation measure described above in Mitigation Measure <u>AIR-1</u> would ensure the Project would not have a significant impact on air quality by implementing practices and procedures during construction of the Project that would ensure development of the Project site would not have substantial adverse effects on air quality.¹ The Park District Board finds mitigation measure <u>AIR-1 is feasible</u>, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impact of the Project on air quality.

BIOLOGICAL RESOURCES

Potential Impact

<u>Impact BIO-1</u>: The Project could have a substantial adverse effect, either directly or through habitat modifications and disturbance, on species identified as a candidate, sensitive, or Special Status species in local or regional plans policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Mitigation Measure

(i) Mitigation Measure BIO-1a, Project-wide: General Conservation Measures to Protect Habitat for All Special Status Wildlife Species.: The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status wildlife species. Prior to conducting work and during work in sensitive biological communities and Special Status species habitats, including work within 100 feet of Patterson Slough, and within or near jurisdictional wetlands, the following measures will be implemented.

- A qualified, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) approved Biological Monitor (Qualified Biologist) shall be present to observe work and shall have the authority to halt work as necessary if permit conditions are being violated.
- Pre-construction biological surveys appropriate to Special Status wildlife species will be conducted by the Qualified Biologist prior to initiation of construction.
- Before any construction activities begin on the Project, the Qualified Biologist shall conduct a training session for construction workers, and Park personnel involved in construction of the Project. The training shall include

¹ Mitigation Measure AIR-1 as described in the Draft EIR reduced potentially significant impacts to air quality to less-thansignificant levels, however, this measure was revised in the Final EIR to further mitigate the identified impacts.

a description of each Special Status species that might occur and their respective habitats, including wetlands, the general measures that are being implemented to protect each of the species as they relate to the Project, and the physical boundaries within which the Project shall be accomplished. The training should also provide instruction in the appropriate protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers.

- Before starting ground disturbing activities within construction areas, the Park District and its Construction Contractors shall clearly delineate the boundaries of the construction area with fencing, stakes, or flags. Contractors shall be required to restrict construction-related activities to within the fenced, staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of construction-related activities in that area. Fencing stakes and flags shall be removed upon completion of construction work. Sensitive habitat areas, including Special Status wildlife species habitat and known populations, and jurisdictional wetlands, shall be clearly indicated on the Project construction plans.
- To prevent Special Status wildlife species from moving through the construction area, the Park District or its Construction Contractors shall install temporary wildlife exclusion fencing. Final fence design, including appropriate animal escape structures within the fencing and fence location, shall comply with permit conditions, as appropriate for each species being protected. Any construction-related disturbance outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval of the Qualified Biologist. New trails, bridges, or other structures shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Qualified Biologist.
- Where wildlife exclusion fencing is not installed and ground disturbing activity is occurring, the Qualified Biologist will approve the proposed disturbance in advance and clear the area prior to the start of ground disturbing activity.
- A USFWS-approved and/or CDFW-approved Biological Monitor should be on-site during installation of the fencing to any Special Status wildlife outside the construction area. The fencing shall be inspected by the qualified Biological Monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. After construction has been completed, the exclusion fencing shall be removed within 72 hours.
- Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Qualified Biologist or a Qualified Biologist working under their direction shall survey within the exclusion area to ensure that no Special Status species are present. The Qualified Biologist or a Qualified Biologist working under their direction shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of Special Status species.
- Excavated soils shall be stockpiled in disturbed areas lacking native vegetation, and/or as shown on the Construction Plans, or approved by the Qualified Biologist.
- All detected erosion caused by Project-related impacts (i.e., grading or clearing for new trails) and other improvements shall be remedied immediately upon discovery.
- The introduction of exotic plant species shall be avoided first through prevention, followed by physical or chemical methods. Construction equipment shall arrive at the Project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Weed-free rice straw or other certified weed free straw shall be used for erosion control. Earth-moving equipment, gravel, fill, or other materials will be weed-free. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter or other debris or seed-bearing material before entering the Park or from an area with known infestations of invasive plants and noxious weeds. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by the Qualified Biologist.
- Use of herbicides as vegetation control measures shall be used in compliance with the Park District's IPM policies and Best Management Practices (BMPs). All uses of such herbicidal compounds shall observe label and other

restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation, as well as additional Project-related restrictions deemed necessary by the CDFW and/or USFWS, and included in the permit conditions. No rodenticides shall be used.

- The introduction of soil-borne pathogens shall be avoided by following the Park District's Pathogen Controls Best Management Practices.
- If Special Status wildlife species are found within or near construction areas during Project construction work, construction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the Project area (if possible). The wildlife resource agency (ies) with jurisdiction over the species shall be contacted regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the Qualified Biologist shall document the activities of the animal within the site; fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the Park District and the appropriate regulatory agency with jurisdiction over the wildlife species.
- Uncommon or previously undocumented Special Status wildlife species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).
- Whenever possible, steep-walled holes or trenches shall be covered each evening to prevent animal entry. If this is not possible and the steep-walled holes or trenches must be left open overnight, escape ramps or structures shall be installed. Steep-walled holes or trenches shall be inspected for trapped animals on a daily basis until they are back-filled. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted immediately to determine the appropriate method for relocation, The Qualified Biologist may elect to order a stop work requirement if they determine it to be necessary, and upon consultation with the appropriate regulatory agency.
- Construction pipes, culverts, or other structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for Special Status species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Special Status species is discovered inside a pipe, and does not move of its own accord, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.
- Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The Qualified Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an appropriate facility. If vehicle or equipment maintenance is necessary, it may be performed in the designated staging areas, as shown on the Construction Plans or approved by the Qualified Biologist.
- Temporarily disturbed areas shall be returned to pre-Project conditions or better.
- Project-related vehicles should observe a 15-mile-per-hour speed limit on unpaved access roads within the limits of construction.
- Documentation of compliance, as required by any regulatory permit conditions, with applicable state and federal laws pertaining to the protection of Special Status wildlife and native and migratory birds and raptors shall be recorded in a daily monitoring report and made available to the CDFW as part of a post construction biological monitoring report.

(ii) Mitigation Measure BIO-1b, Project-wide: Prepare and Implement a Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and Jurisdictional Wetlands: The Park District shall implement the following mitigation measure to restore or compensate for habitat, including Special Status habitat and jurisdictional wetland areas disturbed or impacted by Project actions.

- To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for implementing the Plan. The Plan shall include by proportionate amounts, specific habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed riparian, willow sausal, seasonal wetlands, etc.).
- The Park District shall, prior to construction, have a qualified botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), percent cover of plant species, and comply with botanical survey requirements of Mitigation Measure BIO-1c..
- East Bay Regional Park District shall be the responsible party for preparation and implementation of the HMMP for work/impact mitigation within the Patterson Slough and Western Wetlands Natural Units, the Ranch Road Recreation Unit, and the Historic Patterson Farm Agricultural Unit. Alameda County Flood Control and Water Conservation District (ACFCWCD) shall be the responsible party for HMMP implementation within the Southern Wetlands Natural Unit. Achievement of performance standards shall be based on comparison with impacted sensitive habitat, as required by regulatory permits for the Project. Reference sites of impacted sensitive habitat shall be surveyed for biological resources and documented prior to earthwork.
- Habitat Compensation Measures:
 - Temporarily disturbed ruderal areas shall be stabilized to control erosion and dust production prior to restoration or enhancement.
 - o Disturbed or impacted wetlands shall be compensated at a 2:1 ratio.
 - Disturbed or impacted areas containing rare or Special Status plants that cannot be avoided shall be compensated at a 3:1 ratio.
 - Disturbed or impacted mixed riparian and oak woodland plant communities located within Patterson Slough shall be compensated for at a 3:1 ratio. Work includes re-seeding, replanting, and weed control using PM methods.
- Performance Standards:
 - Existing ruderal/disturbed areas shall have a minimum 70% cover of grasses and forbs within one year of seeding.
 - Wetland areas shall have a minimum 70% relative cover of wetland plants after seven years. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
 - Willow and mixed riparian forest areas that provide compensation for disturbance to their habitats shall have a minimum 50% native plant survival and have achieved a minimum 60% canopy cover within ten years of planting. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.
 - 0 Invasive plants that are listed as High invasive threat by the California Invasive Plant Council (Cal-IPC), exclusive of non-native grasses, shall not exceed a 5% cover after seven years.
- Monitoring and Reporting:
 - o Monitoring will include a combination of photographic monitoring from permanent photo points and random sampling of the vegetative community using a one-square yard sampling frame (quadrat) at permanent vegetation monitoring stations within each target vegetation community, including control sites for each vegetation community. Permanent sampling locations will be located with posts within each vegetation community following completion of final grading, seeding, and planting. One permanent sampling location will also be established within each reference vegetation community located within the Project area. Plant species and their absolute percent (%) cover will be recorded within three randomly located quadrats at each sampling location, including the reference vegetation communities. Sampling will

occur once per year at the end of the wet season, typically in late spring or early summer (May-June) or as timing corresponds with the time when the majority of species will be identifiable.

• Reporting shall occur at years 1, 3, 5, 8 and 10 following construction. If performance standards have been met at year five, the monitoring and reporting can be concluded.

Remedial Measures and Contingencies:

• If the annual monitoring of percent survival and cover indicate that target performance and success criteria, or if health and vigor observations so indicate, and as determined by the Qualified Biologist remedial measures shall be undertaken. These can include re-seeding, mulching, irrigation, replanting, pest control, or relocating target vegetation cover as necessary to achieve the performance criteria. Native plants determined to not be successful may be substituted using comparable native trees, shrubs, vines, and herbaceous species that have demonstrated successful growth and establishment.

(iii) Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species: The Park District, its Construction Contractors, and restoration and maintenance personnel will implement measures to avoid and minimize potential adverse effects on Special Status plants, with a special focus on the Southern Wetlands Natural Unit. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.

- A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants (USFWS, 2000) and CDFW Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (CDFG, 2000). The Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results and consultation with CDFW.
- Locations of Special Status plants in proposed construction areas will be recorded by the qualified Botanist using a global positioning system (GPS) unit, and flagged in the field. The GPS data will be used to create digital and hardcopy maps for distribution to construction inspectors and contractors to inform them of areas where disturbance is prohibited, or where activities are restricted.
- If initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species.
- Access may be restricted around Special Status plant populations through appropriate field direction by the Qualified Botanist. This may include signage, buffers, seasonal restrictions, and design or no access, depending on the Special Status species in question.
- The Park District and its Construction Contractors shall install a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any Qualified Botanist-required buffer areas to prevent encroachment by construction equipment and personnel. The Qualified Botanist will determine the exact location of the fencing. The fencing will be strung tightly on posts set at maximum intervals of 10 feet (3 meters), and will be checked and maintained weekly until all construction is complete in the area where Special Status plant species occur.
- No grading, clearing, storage of equipment or machinery, or other disturbance or construction activity will occur until all temporary construction fencing has been installed by the Park District, and its Construction Contractor, and inspected and approved by the Qualified Botanist.
- Special Status plant species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).
- If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences

at a minimum 3:1 ratio based on the area of lost habitat (accurately field measured) or as determined by the Qualified Biologist and Park District biologists, in consultation with CDFW, which has review and approval authority over a Rare Plant Mitigation Plan/Habitat Mitigation and Monitoring Plan. Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas. Restoration or reintroduction may be located on-site (i.e., within the Project footprint or local vicinity) or at a nearby suitable off-site area within Coyote Hills Regional Park with suitable soil and hydrologic conditions for that species. At a minimum, the Special Status plant mitigation areas shall meet the following performance standards by the fifth year after mitigation planting/seeding, as determined by monitoring, as follows.

- o The compensation area shall be at least the same size as the impact area.
- o Invasive species cover shall be less than or equal to the invasive species cover in the impact area.
- Restored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years.
- The final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the Project Habitat Mitigation and Monitoring Plan (HMMP) see BIO-1b.

(iv) Mitigation Measure BIO-1d, Species-Specific: Conservation Measures to Protect Special Status Birds, Migratory Birds, and Raptors:

- If ground disturbance activities or impacts occur during the breeding season (approximately February 1 through August 31), pre-construction nesting migratory birds, raptors and other Special Status bird species surveys shall be conducted by a Qualified Biologist. Such surveys shall include but not be limited to the following: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act, or by their status as a protected species or Species of Special Concern.
- The pre-construction surveys shall occur within 14 days prior to the ground disturbance and vegetation removal activities. Surveys should be conducted within suitable nesting habitat within 200 feet of the area to be disturbed.
- If the survey does not identify any nesting migratory birds, raptors and other Special Status bird species in the areas potentially affected by the proposed activity, no further action is required. If nesting migratory birds, raptors and other Special Status bird species are found to occur that might be impacted by Project activities, a "no disturbance buffer" will be established around the habitat area. The Qualified Biologist will consult with CDFW to determine the size of the no-disturbance buffer, which will be marked off with temporary orange construction fencing. This buffer may vary depending on habitat characteristics and the species.

(v) Mitigation Measure BIO-1e, Species-Specific: Conservation Measures to Protect Habitat for Salt Marsh Harvest Mouse: Additional Project-specific avoidance and minimization measures for salt marsh harvest mouse (SMHM) in areas within 200 feet of suitable habitat, such as saline seasonal wetlands near Patterson Ranch Road (pickleweed dominated areas) would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail. These measures would be consistent with those required by USFWS and CDFW, and as specified in any permit conditions. They are likely to include the following:

- Removal of vegetation where needed in areas near suitable habitat under the supervision of an agency-approved Qualified Biologist using approved methods.
- Upon verifying work zones are mouse free by a Qualified Biologist, Install species-appropriate Environmentally Sensitive Area (ESA) wildlife exclusion fencing prior to initiation of construction in potential mouse habitat areas. Exclusion fencing for Salt Marsh Harvest Mouse shall be designed with agency approved doors to allow escape of trapped mice and have a "no climb" design to ensure mice do not climb over the fence once installed.
- Check in, under and around equipment and material stockpiles for Special Status wildlife on a daily basis each morning, prior to initiation of work.

(vi) Mitigation Measure BIO-1f, Species-Specific: Conservation Measures to Protect Habitat for California Black Rail during Breeding Season:

- Project specific avoidance and minimization measures for California black rail in areas within 200 feet of suitable habitat, such as saline seasonal wetlands, would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail, consistent with those required by the USFWS and CDFW as specified in any permit conditions.
- Protocol level surveys would be conducted in suitable habitat for California black rail that are within 200 feet of Project "Limits of Work" or as directed in any agency permit conditions. Surveys will be completed prior to initiation of construction each year of proposed construction activity that may potentially impact black rails.
- Protocol surveys would be conducted around dawn and/or dusk between February and March when black rails are most likely to vocalize during their breeding season.
- If active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows.

(vii) Mitigation Measure BIO-1g, Species-Specific: Conservation Measures to Protect Habitat for Burrowing Owl:

• Burrowing owl surveys will be completed by a CDFW-approved Qualified Biologist for those portions of the Project area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols establish by CDFW and may require multiple site visits with the final survey completed no more than 14 days prior to initiation of construction activities

Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols.

(viii) Mitigation Measure BIO-1h, Species-Specific: Conservation Measures to Protect Western Pond Turtle:

• A qualified Biologist approved by the CDFW shall conduct a preconstruction biological survey for Western Pond Turtle (WPT). The survey area shall include those portions of Crandall Creek (Line-K), Ardenwood Creek (Line-P), DUST Marsh, and Patterson Slough where construction disturbance could occur, or within 500 feet of all such construction activity. The surveys shall be conducted 48 hours prior to initial construction disturbance. Any identified WPT shall be relocated, by a Qualified Biologist, to a suitable location approved by CDFW and outside of the Project's construction disturbance boundaries.

(ix) Mitigation Measure BIO-1i, Species-Specific: Conservation Measures to Protect Habitat for Bats (along with Implementation of the City of Fremont's Standard Development Plan): In advance of tree removal and dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the Project, the following measures shall be implemented:

- Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, outside of bat maternity roosting season (approximately April 15 August 31), and outside of months of winter torpor (approximately October 15 February 28), to the extent feasible.
- If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the Project site where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the Qualified Biologist.
- The Qualified Biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F.
- Removal of trees with active or potentially active roost sites shall follow a two-step removal process:
 - On the first day of tree removal and under supervision of the Qualified Biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws.

- On the following day and under the supervision of the Qualified Biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe).
- Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the Qualified Biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to roost.
- To compensate for any loss of bat roosts within Patterson Slough, the Park District shall install artificial bat roosts (bat houses) when an existing bat roost is lost. The artificial bat roost(s) shall be of such a type and quantity as to provide sufficient replacement roosts for all of a displaced colony. All work, including design and location of artificial roosts and other mitigation measures shall be completed by a Qualified Biologist experienced with bats, including bat surveys and preparing bat protection and mitigation plans Where Special Status bats are found to be present, the Qualified Biologist shall consult with CDFW.

Finding

Implementation of mitigation measures BIO-1a-BIO-1i would reduce potential direct impacts to candidate, sensitive, and Special Status species, sensitive habitat, and to Special Status plants generally, and to Salt Marsh Harvest Mouse, California black rail, California burrowing owl, western pond turtle, and Special Status bats to a less-than-significant level by implementing practices and procedures during construction of the Project that would ensure development of the Project site would not have substantial adverse effects on these species.² Biological monitoring, measures to prevent erosion, training and requirements for workers at the site, limitations on construction during wet weather, and fencing to prevent protected species from entering the Project site all are designed and would effectively prevent substantial adverse effects on the afore-mentioned species.

The Board finds mitigation measures BIO-1a through BIO-1i are feasible, adopts such measures, and finds such measures will lessen to an insignificant level the potentially significant direct impact of the Project on these protected species.

Potential Impact

<u>Impact BIO-2</u>: The Project could have a substantial adverse impact on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services.

Mitigation Measure

(i) Mitigation Measure BIO-2a, Project-wide: Minimize Disturbance to Riparian Habitat: For work occurring immediately adjacent to riparian habitat, including willow thickets and adjacent areas of oak woodland, riparian areas shall be clearly delineated with flagging by a Qualified Biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian friendly fiber rolls (i.e., no monofilament), or other appropriate erosion control material. Material staging, trails and all other Project-related activity shall be located as far possible from riparian areas. If riparian areas cannot be entirely avoided by construction activities, any temporarily impacted areas shall be restored to preconstruction conditions or better at the end of construction (see below Mitigation Measure BIO-2b).

(ii) Mitigation Measure BIO-2b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Riparian Habitat: If temporary disturbance to riparian habitat within the Project area cannot be avoided, the HMMP discussed in Mitigation Measure BIO-1b, shall be implemented for riparian habitats temporarily impacted by construction activities. The Plan shall outline measures to restore, enhance, improve or re-establish riparian habitats on site.

Finding

Implementation of the mitigation measures described above in Mitigation Measure BIO-2a and BIO-2b would ensure the Project would not have a significant impact on riparian habitat by requiring the delineation, avoidance, restoration and enhancement of riparian areas. The Park District Board finds the mitigation measures BIO- 2a and BIO-2b are feasible, adopts such measures, and finds such measures will lessen to an insignificant level the potentially significant impact of the Project on these sensitive habitat areas.

² The mitigation measures described in the Draft EIR reduced potentially significant impacts to biological resources to lessthan-significant levels. However, several measures were revised in the Final EIR to provide clarification and to further mitigate the identified impacts.

Potential Impact

<u>Impact BIO-3</u>: Wetlands: This Project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, as well as to Waters of the State of California.

Mitigation Measure

(i) Mitigation Measure BIO-3a, Project-wide:

- The Project jurisdictional wetland delineation shall be confirmed in coordination with the US Army Corps of Engineers (USACE) and CDFW to determine the extent of Waters of the U.S. and Waters of the State within the Project area to ensure construction footprints and associated construction disturbance areas do not encroach into wetlands.
- The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the USACE, RWQCB, and CDFW to the extent feasible.

(ii) Mitigation Measure BIO-3b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Wetlands and Waters of the U.S. and of the State: If temporary disturbance or permanent loss of wetlands cannot be avoided, the HMMP (see Mitigation Measure BIO-1b) shall be implemented for wetlands or waters of the U.S. or of the State impacted by construction activities. The HMMP shall outline measures to restore, improve, or re-establish wetland habitat within Coyote Hills Regional Park to ensure compensatory mitigation requirements for wetland impacts are satisfied.

Finding

Implementation of BIO-3a and BIO 3b would ensure the Project would not have a significant impact on wetlands by ensuring that wetlands are avoided to the extent feasible and that any wetlands that cannot be avoided will be restored, improved, or re-established as wetland habitat.

The Park District Board finds mitigation measures BIO-3a and BIO-3b are feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impact of the Project on burrowing owls.

CULTURAL AND TRIBAL CULTURAL RESOURCES

Potential Impact

Impact CUL-1: Project construction could disturb the Arden Dairy Milk House on the site, a historic building.

Mitigation Measure

(i) Mitigation Measure CUL-1a: The Park District shall retain the Arden Dairy Milk House in its current location to maintain integrity of location. Annual inspections by Park District maintenance staff shall be conducted each year to assess the building's interior and exterior condition, including weather tightness and vandal resistance. Following inspection, repairs and maintenance shall be conducted as necessary in a timely fashion. Repairs and maintenance activities and prioritization shall be guided by the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995).

(ii) Mitigation Measure CUL-1b: If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont. A Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code.

Finding

Implementation of mitigation measures CUL-1a and CUL-1b above would ensure the Project would not have a substantial adverse effect or significant impact on the Arden Dairy Milk House. Monitoring and inspection requirements will ensure maintenance of the historic structure and any restoration or adaptive reuse of the building would be undertaken in accordance with guidance from the Secretary of the Interior so that the historic integrity of the structure is preserved.

The Board finds mitigation measures CUL-1 and CUL-2 are feasible, adopts such measures, and finds such measures will lessen to an insignificant level the potentially significant impact of the Project on the Arden Dairy Milk House.

Potential Impact

<u>Impact CUL-3</u>: Excavation and earth moving activities for the Proposed Project could have an adverse impact on the two unrecorded midden exposures, and the "shell midden" deposit present at two locations within the Project site. These middens may contain human remains, as well as currently undiscovered Native American cultural objects and human remains.

Mitigation Measure

(i) Mitigation Measure CUL-3a: In order to mitigate potential adverse impacts to Native American cultural objects discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by a qualified Archaeologist meeting the Standards of the Secretary of the Interior. The Archaeologist shall, in accordance with EBRPD Guidelines for Protecting Parkland Archaeological Sites, identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in accordance with the recommendations of the evaluating Archaeologist in consultation with the East Bay Regional Park District, as Lead Agency, and CEQA Guidelines §15126.4 (b)(3)(C). Such mitigation may include additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that prehistoric human remains might be encountered.

(ii) Mitigation Measure CUL-3b: If Native American human remains are discovered during construction, implement Mitigation Measure CUL-5.

Finding

Implementation of mitigation measures CUL-3a and CUL-3b above would ensure the Project would not have a substantial adverse effect or significant impact on the two unrecorded midden exposures, and the "shell midden" deposit. Compliance with the Park District's Guidelines for Protecting Parkland Archaeological Sites and implementation of Mitigation Measure CUL-3b would reduce impacts associated with accidental damage to unknown archaeological resources to a less-than-significant level by requiring the incorporation of professionally-accepted and legally-compliant procedures for the discovery of previously undocumented significant archaeological resources.

The Park District's Board finds Mitigation Measures CUL-3a and CUL-3b are feasible, adopts these mitigation measures, and finds that these measures will lessen to an insignificant level the potentially significant impacts of the Project associated with accidental damage to the middens onsite and to unknown archaeological resources.

Potential Impact

<u>Impact CUL-4</u>: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could impact fossil containing rock units.

Mitigation Measure

(i) Mitigation Measure CUL-4: The Park District shall be notified if fossils and possible unique geological features are uncovered during construction of the Proposed Project. Work shall halt within 50 feet of the find until the situation can be assessed by a qualified Geologist or Paleontologist. The Geologist or Paleontologist shall identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. Mitigation may include avoidance of the resource; preparation of a treatment plan that could require recordation, collection, and analysis of the discovery; or curation of the collection and supporting documentation in an appropriate depository. All feasible recommendations of the Geologist or Paleontologist shall be implemented.

Finding

Implementation of mitigation measures CUL-4 above would ensure that the Project would not have a substantial adverse

effect or significant impact on unknown fossils. Implementation of Mitigation Measure CUL-4 would reduce impacts associated with accidental damage to unknown fossils and paleontological resources to a less-than-significant level by requiring the incorporation of professionally-accepted and legally-compliant procedures for the discovery of previously undocumented significant paleontological resources.

The Park District's Board finds Mitigation Measure CUL-4 is feasible, adopts this mitigation measure, and finds that the measure will lessen to an insignificant level the potentially significant impacts of the Project associated with accidental damage to unknown paleontological resources.

Potential Impact

Impact CUL-5: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on currently undiscovered human remains.

Mitigation Measure

(i) Mitigation Measure CUL-5: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The coroner shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the Park District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The most likely descendant shall have 48 hours after being allowed access to the site to make recommendations for disposition of the remains and associated grave goods.

Finding

Implementation of mitigation measures CUL-5 above would ensure that the Project would not have a substantial adverse effect or significant impact on unknown human remains. Implementation of Mitigation Measure CUL-5 would reduce impacts associated with accidental damage to unknown human remains to a less-than-significant level by ensuring such remains will be protected and treated in consultation with appropriate Native American descendants. For example, any discovery of such remains will require the Park District to immediately stop work and contact the coroner. If the remains are determined to be of Native American origin, the coroner will contact the Native American Heritage Commission, which will notify the Most Likely Descendant (MLD) to inspect the site and provide recommendations for proper treatment of the remains. In addition, the MLD and a qualified archeologist will supervise the removal of the remains.

The Park District's Board finds Mitigation Measure CUL-5 is feasible, adopts this mitigation measure, and finds that the measure will lessen to an insignificant level the potentially significant impacts of the Project associated with accidental damage to unknown human remains.

Potential Impact

Impact CUL-6: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on known and currently undiscovered tribal cultural resources on the Project site.

Mitigation Measure

(i) Mitigation Measure CUL-6a: Implement Mitigation Measure CUL-3a.

(ii) Mitigation Measure CUL-6b: Implement Mitigation Measure CUL-5.

Finding

Implementation of mitigation measures CUL-6a and CUL-6b above would ensure the Project would not have a significant impact on any known and currently undiscovered tribal cultural resources, including human remains. Implementation of Mitigation Measure CUL-6a ensures compliance with the Park District's Guidelines for Protecting Parkland Archaeological Sites and would reduce impacts associated with accidental damage to unknown archaeological resources to a less-than-significant level by requiring the incorporation of professionally-accepted and legally-compliant procedures for the

discovery of previously undocumented significant archaeological resources. Implementation of Mitigation Measure CUL-6b would reduce impacts associated with accidental damage to unknown human remains to a less-than-significant level by ensuring such remains will be protected and treated in consultation with appropriate Native American descendants.

The Park District's Board finds mitigation measures CUL-6a and CUL-6b are feasible, adopts such measures, and finds such measures will lessen to an insignificant level the potentially significant impact of the Project on any known and currently undiscovered tribal cultural resources, archaeological resources, and human remains.

GEOLOGY AND SOILS

Potential Impact

<u>Impact GEO-1</u>: The site is likely subject to strong seismic ground shaking during the design life of the Project, this could result in damage to improperly designed structures on unstable geologic units and expansive soils.

Mitigation Measure

(i) Mitigation Measures GEO-1: Any construction built as a result of the implementation of the Project shall meet the requirements of the current California Building Code Vol. 1 and 2, including the California Building Standards, current edition, published by the International Conference of Building Officials, and as modified by the amendments, additions and deletions as adopted by the City of Fremont, California. Structures already present at the site and planned for reuse as part of the Project should be evaluated for seismic stability in accordance with Fremont General Plan Policy 10-2.5: Removal of Susceptible Structures, and Implementation 10-2.5.A: Seismic Retrofit Programs.

Finding

Implementation of mitigation measure GEO-1 would ensure the Project would not have any significant impacts associated with groundshaking by requiring compliance with applicable standards and through inspection and evaluation of existing structures to ensure compliance with applicable policies.

The Board finds mitigation measure GEO-1 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impact of the Project related to unstable geologic units and expansive soils.

Potential Impact

Impact GEO-2: Seismic-related Ground Failure, including liquefaction and expansive soils

Mitigation Measure

(i) Mitigation Measure GEO-2: Design-level Geotechnical recommendations shall be prepared for the Project under the direction of a California Registered Geotechnical Engineer, or Registered Civil Engineer experienced in geotechnical engineering. The Geotechnical recommendations shall be based on the information developed for the site and shall establish the seismic design parameters, as determined by the geotechnical engineer or civil engineer in accordance with requirements of the California Building Code, for improvements to the Project site. The Geotechnical recommendations and design plans shall identify specific measures to reduce the liquefaction potential of surface soils in areas where liquefaction would pose a risk to health and safety in accordance with Public Resources Code Section 2693 (c).

Finding

Implementation of the mitigation measures described above would ensure the Project would not have a significant impact related to liquefaction and expansive soils. While the Park District has prepared preliminary design drawings, the final construction design drawings will provide additional detail. Mitigation Measure GEO-2 will ensure the final design drawings for the Project meet certain performance standards including specified factors of safety that will further ensure the Project does not adversely impact the stability of the area. Project construction must conform to the final geotechnical plans.

The Board finds mitigation measures GEO-2 are feasible, adopts the measure, and finds such a measure will lessen to an insignificant level the potentially significant impact of the Project related to liquefaction and expansive soils.

Potential Impact

Impact GEO-3: Potential impacts of soil erosion and loss of topsoil.

Mitigation Measure

(i) Mitigation Measure GEO-3: In accordance with the Clean Water Act and the State Water Resources Control Board (SWRCB), the Park District for any construction projects that disturb more than one acre shall file a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of construction. The SWPPP shall include specific best management practices (BMPs) to reduce soil erosion. This is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).

Additionally, any construction activities planned as a result of the implementation of the plan shall require an Erosion Control Plan to be submitted to the City of Fremont in conjunction with a Grading Permit Application. The Plan shall include winterization, dust, erosion and pollution control measures conforming to the California Stormwater Quality Association (CASQA) Best Management Practices handbooks, with sediment basin design calculations. The Erosion Control Plan shall describe the "best management practices" (BMPs) to be used during and after construction to control pollution resulting from both storm water and construction water runoff. The Plan shall include locations of vehicle and equipment staging, portable restrooms, mobilization areas, and planned access routes.

Recommended soil stabilization techniques include placement of plastic-free straw wattles, silt fences, berms, and gravel construction entrance areas or other control to prevent tracking sediment off-site onto city streets and into storm drains, as well as hydroseeding or planting of all disturbed areas.

Finding

Implementation of mitigation measure GEO-3 would ensure the Project would not have a significant impact related to soil erosion and loss of topsoil by requiring preparation of a SWPPP and implementation of BMPS to reduce soil erosion. The BMPs will ensure control of pollution resulting from stormwater and construction runoff thereby ensuring that the Project does not result in adverse impacts related to erosion and loss of topsoil.

The Board finds mitigation measure GEO-3 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impact of the Project related to erosion and loss of topsoil.

Potential Impact

Impact GEO-4: Liquefaction and expansive soils.

Mitigation Measure

(i) Mitigation Measure GEO-4: Unstable Geologic Units and Expansive Soils: Proper foundation engineering and construction of any structures built as a result of implementation of the Project shall be performed in accordance with the recommendations of a Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design. Geotechnical recommendations shall address zones of potentially liquefiable or expansive soil as they relate to proposed improvements and provide foundation, road pavement section, concrete slab-on-grade, utility construction and other recommendations to mitigate any zones encountered.

The structural engineering design shall incorporate seismic parameters as outlined in the current California Building Code. The Geotechnical recommendations shall establish the seismic design parameters, as determined by the geotechnical engineer in accordance with requirements of the current California Building Code.

Finding

Implementation of mitigation measure GEO-4 would ensure the Project would not have a significant impact related to liquefaction and expansive soils. Implementation of the mitigation measures described above would ensure the Project would not have a significant impact related to liquefaction and expansive soils. While the Park District has prepared preliminary design drawings, the final construction design drawings will provide additional detail. Mitigation Measure GEO-4 will ensure the final design drawings for the Project meet certain performance standards including specified factors of safety that will further ensure the Project does not adversely impact the stability of the area. Project construction must conform to the final geotechnical plans.

The Board finds mitigation measure GEO-4 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impact of the Project related to unstable soils and expansive soils.

HAZARDS AND HAZARDOUS MATERIALS

Potential Impact

Impact HAZ-1: Potential ecological impact of contaminated soils.

Mitigation Measure

(i) Mitigation Measure HAZ-1:

Soil Testing and LANL Benchmarks: The Park District shall conduct sampling and testing of surface and near-surface soils in the areas of the Western Wetlands Natural Unit that are proposed for wetland restoration. The sampling and testing program shall include concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene. The test results shall be compared to the ecological screening benchmarks for soil and sediment (ECORISK Database) developed by Los Alamos National Laboratory (LANL). If no samples exceed the respective LANL benchmarks, no further mitigation is required.

(ii) Mitigation Measure HAZ-2:

Ecological Risk Assessment: Using the results of testing for organochlorine pesticides from Mitigation Measure HAZ-1, the Park District shall conduct a focused ecological risk assessment to evaluate the effects of known concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene, relative to likely ecological receptors at the site, particularly insectivorous birds and mammals. If the predictive ecological assessment identifies significant risk, Mitigation Measures HAZ-3, HAZ-4, and HAZ-5 shall be implemented. If the predictive ecological assessment does not identify significant risk, no further mitigation is required.

(iii) Mitigation Measure HAZ-3:

Site Specific Health and Safety Plan: If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, a Site-Specific Health and Safety Plan for construction workers shall be prepared by the Park District and approved by an industrial hygienist prior to the start of any earthmoving activities associated with the alternative remediation strategies. The site-specific Health and Safety Plan shall be implemented by the Construction Contractors during remediation work. The Site-Specific Health and Safety Plan shall be prepared in accordance with the California Division of Occupational Safety and Health (CAL/OSHA) Standards identified as part of Title 8 of the California Code of Regulations.

(iv) Mitigation Measure HAZ-4:

Site Specific Air Quality Monitoring Plan: If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, an Air Quality Monitoring Plan shall be prepared by the Park District and approved by the California Department of Toxic Substances Control (DTSC) and/or other regulatory oversight agency or agencies reviewing the remediation of the Project area, prior to the start of any earthmoving activities associated with remediation strategies. The Air Quality Monitoring Plan shall be implemented by the Construction Contractors during remediation work in order to prevent toxic dust in the air from reaching levels that are hazardous to the workers and/or surrounding residents. The Air Quality Monitoring Plan shall be prepared in accordance with the CAL/OSHA Standards identified as part of Title 8 of the California Code of Regulations.

(v) Mitigation Measure HAZ-5:

Soil Remediation: Contaminated soil shall be excavated and disposed offsite at a permitted Class II or Class III disposal facility, if required. Alternatively, soils with very low levels of contamination that do not pose a human health risk could be used beneficially as fill below paved parking areas or areas that receive aggregate base as a capping. Remediation shall include confirmation samples from excavations within remedial areas to limit the volume removed and verify that identified contaminated soil has been removed from the site. Adequate dust mitigation measures during excavation shall be implemented, and may include, but are not limited to, application of water and dust suppressants helps to control airborne particles, restrictions and/or limits to soil movement procedures, use of personal protective equipment (PPE), respirators, and decontamination procedures to reduce potential exposure to and spreading of contaminants. Truck cleaning shall include dry brushing after loading and using wheel grates to knock off excess dirt upon exiting the site. Soil loads in trucks shall be wetted slightly, leveled, and covered to minimize soil falling onto roadways. Transportation routes, times of work, and dust controls shall be chosen to reduce impacts to residential and other sensitive areas during removal and transport over public right-of-way (ROW). Remediation shall be conducted in coordination with, and approval of, the California

Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB), should testing indicate soil contamination at levels requiring remedial action.

Finding

Implementation of mitigation measures HAZ-1, HAZ-2, HAZ-3, HAZ-4, and HAZ-5 would ensure that potential ecological impacts from contaminated soils are reduced to less than significant levels by implementing practices and procedures during the pre-construction period of the Project that would ensure Project implementation would not have substantial adverse effects associated with accidental exposure to contaminated soil. Specifically, implementation of these mitigation measures would require soil testing of soils proposed for wetland restoration, preparation of an Ecological Risk Assessment, preparation of a Site Specific Health and Safety Plan and an Air Quality Monitoring Plan if significant risk is identified, and soil remediation if necessary. Together, these measures will minimize risks from potential hazards related to contaminated soil.

The Park District's Board finds Mitigation Measures HAZ-1, HAZ-2, HAZ-3, HAZ-4, and HAZ-5 are feasible, adopts these mitigation measures, and finds that this mitigation measures will lessen to an insignificant level the potentially significant impacts of the Project associated with accidental exposure to contaminated soil.

Potential Impact

<u>Impact HAZ-2</u>: Potential impact of asbestos and lead-based paint in structures on the site, including nearby schools.

Mitigation Measure

(i) Mitigation Measure HAZ-6:

Asbestos and Lead-Based Paint: For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potentially friable asbestos-containing building materials (ACBMs) in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition that may disturb the materials, by a contractor registered with Cal/OSHA as an asbestos abatement contractor. The contractor performing abatement shall hold the C-22 asbestos abatement license or a B-class general license with asbestos certification. Because asbestos-containing materials on the Project site are likely to become friable during demolition, all such materials must be abated prior to demolition. All demolition and disassembly activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. All friable asbestos materials, and any non-friable materials that may become friable during abatement, shall be disposed of as non-hazardous asbestos-containing material. Non-friable materials that are not made friable may be disposed of as non-hazardous asbestos-containing material. A 10-day notice of planned asbestos removal and disposal shall be given to the Bay Area Air Quality Management District (BAAQMD), along with a notification of demolition of structure(s). The local office of the State Occupational Safety and Health Administration (OSHA) shall be notified at least 24 hours prior to abatement activities.

For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potential lead-based paint. Personnel must have lead training sufficient to meet the requirements of Cal/OSHA, 8 CCR 1532.1. The workers shall use lead-safe work practices when handling paints with any detectable amount of lead. A containment area shall be used to prevent the buildup of lead dust on remaining surfaces, in compliance with California Department of Public Health requirements. All waste streams created as part of the Project shall be profiled or characterized prior to disposal, and packaged as applicable, in compliance with the requirements of the California Department of Toxic Substances Control and Title 22.

Finding

Implementation of Mitigation Measure HAZ-6 would reduce the impact associated with accidental exposure to asbestos and lead based paint and exposure of schools to hazardous or acutely hazardous materials by implementing practices and procedures during the pre-construction period of the Project that would ensure Project implementation would not have substantial adverse effects associated with accidental exposure to hazardous or acutely hazardous materials. Specifically, implementation of Mitigation Measure HAZ-6 would require removal of asbestos and lead contamination using a qualified contractor registered with Cal/OSHA and all abatement work will be done in accordance with Cal/OSHA standards and in compliance with California Department of Public Health, California Department of Toxic Substances Control, and

Title 22 requirements. This mitigation measure would reduce potential hazards to workers, the public, schools, and the environment associated with exposure to any hazardous materials during demolition activities.

The Board finds Mitigation Measure HAZ-6 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impact of the Project associated with asbestos and lead contamination.

HYDROLOGY

Potential Impact

Impact HYDRO-1: Erosion and Sediment Control

Mitigation Measure

(i) Mitigation HYDRO-1: Erosion and Sediment Control: The Park District shall prepare a Soil Erosion Control and Revegetation Plan that addresses temporary construction-related erosion control and provides permanent erosion control through revegetation and other means. The Plan, which can be a part of the Project SWPPP see (HYDRO-2) shall be incorporated into the Project's Construction Documents. The Construction Plans shall specify erosion and sediment control measures, including Best Management Practices (BMPs) to control short-term construction-related water quality impacts. BMPs shall include at a minimum the following measures (where applicable):

- Limiting access routes and stabilizing access points. Surface disturbance of soil and vegetation shall be minimized; existing access and maintenance roads shall be used wherever feasible.
- Stabilizing graded areas as soon as possible following completion of disturbance with seeding, mulching, and installation of erosion control materials such erosion control blankets and straw rolls, or other approved and effective methods. Only native seed and plant materials shall be used, unless otherwise approved by the Qualified Biologist.
- Delineating clearing limits, easements, setbacks, environmentally sensitive areas, and drainage courses by marking them in the field, and installing exclusion fencing, silt fencing, and/or coir logs or straw rolls.
- Stabilizing and preventing sediment from entering temporary conveyance channels and storm drain outlets.
- If rainfall is expected to occur, using temporary sediment control measures, such as additional silt fencing, straw rolls, covering stock piles and directing runoff to sediment detention structures to filter and remove sediment.
- Use temporary measures, such as flow diversion, temporary ditches, and silt fencing or straw wattles.
- Any stockpiled soil shall be placed, sloped, and covered so that it would not be subject to accelerated erosion.
- Accidental discharge of all Project related materials and fluids into local waterways shall be avoided by using straw rolls or silt fences, constructing berms or barriers around construction materials, or installing geofabric in disturbed areas with long, steep slopes.
- After ground-disturbing activities are complete for each Project component constructed, all graded or disturbed areas shall be covered with protective material such as mulch, and re-seeded with native plant species. The Erosion Control and Revegetation Plan SWPPP shall include details regarding site preparation, top soiling or composting, seeding, fertilizer, mulching, and temporary irrigation.

(ii) Mitigation HYDRO-2: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) and a Spill Control and Countermeasures Plan (SCCP) shall be prepared and implemented by the Park District's Construction Contractor following SWRCB standards for erosion control and stormwater management. Specific measures, as cited below, shall be adapted from the most current edition of the Stormwater Best Management Practice Handbook for Construction, published by the California Stormwater Quality Association (CASQA). The SWPPP shall include Best Management Practices (BMPs) to prevent or minimize stormwater pollution during construction activities, as well as addressing post construction stormwater management and permanent erosion control. The Project Erosion Control and Revegetation Plan, and Spill Control and Countermeasures Plan, shall be included as part of the SWPPP. Plan preparation and implementation shall be included in the Project's Construction Documents.

(iii) Mitigation HYDRO-3: Equipment Maintenance: All refueling and/or maintenance of heavy equipment shall take place at a minimum of 50 feet away from the top of bank of creeks and all identified jurisdictional wetlands and Waters of

the US drainage courses. The refueling/maintenance and construction staging area shall be bermed, graveled, or covered with straw and incorporate measures for capture of any accidental spills. All temporary construction lay-down and staging areas shall be restored upon completion of work with silt fences, straw rolls, and ground bags, etc. removed.

Finding

Implementation of Mitigation Measures HYDRO-1, HYDRO-2, and HYDRO-3 ensure the Project would not have a significant impact water quality related to erosion and sedimentation by implementing practices and procedures during the pre-construction and construction periods of the Project that would ensure Project implementation would not have substantial adverse effects on water quality. Specifically, these mitigation measures require preparation of an Erosion and Sediment Control Plan and a SWPPP, which will specify BMPs to prevent or minimize pollution during construction. HYDRO-3 prescribes procedures to be followed and ensures water quality protection during equipment maintenance activities.

The Park District Board finds Mitigation Measures Mitigation Measures HYDRO-1, HYDRO-2, and HYDRO-3 are feasible, adopts such measures, and finds such measures will lessen to an insignificant level the potentially significant impacts water quality from erosion and equipment maintenance activities.

Potential Impact

Impact HYDRO-2: Potential impact of wells on groundwater.

Mitigation Measure

(i) Mitigation Measure HYDRO-4: The Park District shall coordinate and consult with the Alameda County Water District and obtain a permit or approval prior to implementing the following:

- Deconstruction and closure of abandoned wells and related irrigation and drainage infrastructure.
- Drilling for piers or wells that may penetrate groundwater aquifers.
- Provide continued access to existing monitoring wells and continue to cooperate with ACWD in monitoring activities.

(ii) Mitigation Measure HYDRO-5: Unused Septic Tank and Leachfield Systems:

The Park District shall obtain a permit or approval from Alameda County Environmental Health for the closure and abandonment of obsolete and unused septic tank and leachfield systems.

Finding

Implementation of Mitigation Measures HYDRO-4 and HYDRO-5 would ensure the Project would not have any significant impacts on groundwater by implementing practices and procedures during the pre-construction and construction periods of the Project that would ensure Project implementation would not have substantial adverse effects on water quality. Specifically, these mitigation measures require that the Park District pursue appropriate permits with the Alameda County Water District, facilitate monitoring of wells, and follow County regulations and requirements associated with abandonment of wells and septic systems.

The Board finds Mitigation Measure HYDRO-4 and HYDRO-5 are feasible, adopts such measures, and finds such measure wills lessen to an insignificant level the potentially significant water quality impacts.

Potential Impact

Impact HYDRO-3: Potential stormwater impacts.

Mitigation Measure

(i) Mitigation Measure HYDRO-6: Stormwater Management:

The Park District shall prepare and implement a post construction stormwater management plan in compliance with the City of Fremont's joint municipal stormwater permit and development permit program.

Finding

Implementation of Mitigation Measures HYDRO-6 would ensure the Project would not have any significant impacts on water quality by implementing practices and procedures during the post-construction period of the Project that would

ensure Project implementation would not have substantial adverse effects on water quality. Specifically, this mitigation measure requires that the Park District pursue appropriate permits from the City of Fremont and comply with City requirements through implementation a stormwater management plan.

The Board finds Mitigation Measure HYDRO-6 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant water quality impacts associated with stormwater.

Potential Impact

Impact HYDRO-4: Potential flood hazards.

Mitigation Measure

(i) Mitigation Measure HYDRO-7: Bridge Design:

The Park District shall prepare and submit final bridge plans for all new vehicular and pedestrian bridges that cross waterways under jurisdiction by the City of Fremont or Alameda County. The bridge plans are subject to review and approval by the City of Fremont Engineering Department and Alameda County Flood Control and Water Conservation District. The bridge plans shall include structural engineering, geotechnical engineering, and hydraulic engineering information. The responsible designer shall be a State of California licensed Civil Engineer and shall be experienced in hydraulic analysis, bridge design, and flood channel and bank protection design. The Engineering Plans shall demonstrate conformity to City of Fremont, Alameda County, and FEMA floodplain management regulations and include design elevations of the bridge/boardwalk, conformity with 100-year flood elevation freeboard requirements, the locations and structural design of the bridge abutments with respect to flood flows, bridge loading, and channel bank protection requirements.

Finding

Implementation of Mitigation Measures HYDRO-7 would ensure the Project would not have any significant impacts related to increased risk of flooding by implementing practices and procedures during the pre-construction period of the Project that would ensure Project implementation would not result in increased flood risk. Specifically, this mitigation measure requires that bridge plans are prepared by a licensed Civil Engineer with relevant experience and that plans include structural engineering, geotechnical engineering, and hydraulic engineering information. In addition, the mitigation measure ensures conformity with City of Fremont, Alameda County, and FEMA floodplain management regulations.

The Board finds Mitigation Measure HYDRO-6 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant flooding impacts associated with bridge construction.

NOISE

Potential Impact

Impact NOI-1: Temporary Noise Impacts

Mitigation Measure

(i) Mitigation Measure NOI-1: To mitigate temporary noise impacts, the following BMPs shall be incorporated into the construction documents to be implemented by the Project Contractor:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Designate a noise (and vibration) disturbance coordinator at the Park District who shall be responsible for responding to complaints about noise (and vibration) during construction. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and determine and implement reasonable measures warranted to correct the problem.

• Limit noise generating activities to the weekday hours of seven a.m. to seven p.m. and the Saturday or holiday hours of nine a.m. to six p.m., with Sunday noise not allowed per City noise ordinance.

Finding

Implementation of Mitigation Measure NOI-1 would reduce impacts associated with short-term construction noise to a less-than-significant level by implementing noise reduction measures such as installing mufflers, using the quietest equipment possible, prohibiting unnecessary idling, and limiting hours of noise-generating activities. With these measures, construction noise levels associated with the Project would be minimized and a substantial temporary increase in ambient noise levels would not occur.

The Board finds mitigation measure NOI-1 feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant air quality impacts associated with construction of the Project.

TRANSPORTATION

Potential Impact

<u>Impact TRANSP-1</u>: The Proposed Project would result in an increase in traffic delays at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection.

Mitigation Measure

(i) Mitigation Measure TRANSP-1: To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City of Fremont should institute "Right Turn Only" from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping, and raised curbs may be needed to reinforce the right-turn only requirement. The Park District shall contribute its fair share (one percent) toward the cost of the improvements.

Finding

Implementation of mitigation measure TRANSP-1would ensure the Project would not result in significant traffic congestion impacts by requiring the Park District to pay its fair share toward the cost of improvements required for the City of Fremont to institute "Right Turn Only" traffic movements from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. Compliance with TRANSP-1 will mitigate potential traffic congestion impacts from the Project.

The Board finds mitigation measure TRANSP-1 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant traffic congestion impacts associated with the Project.

Potential Impact

<u>Impact TRANSP-2</u>: The Proposed Project would increase use of the pedestrian and bicyclist crosswalk at Paseo Padre Parkway, which is not signalized.

Mitigation Measure

(i) Mitigation Measure TRANSP-2: The Proposed Project shall contribute a fair share (one percent) of the cost of future intersection modifications to improve pedestrian and bicycle access across Paseo Padre Parkway, at or before the time the City of Fremont implements intersection modifications. These intersection improvements may consist of:

- Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet.
- Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles.
- Shorten the northbound right turn weaving area to slow vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone.
- Install additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks.
- Upgrade the crosswalks from transverse markings (two white lines) to continental markings.

- Add yield lines 30 feet in advance of the crosswalks.
- Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway.
- The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future.

Finding

Implementation of mitigation measure TRANSP-2 would ensure the Project would not result in significant congestion impacts to the pedestrian and bicyclist crosswalk at Paseo Padre Parkway by requiring the Park District to pay its fair share toward the cost of improvements to the pedestrian and bicyclist crosswalk at Paseo Padre Parkway. Compliance with TRANSP-2 will mitigate potential Project-related impacts associated with congestion of the crosswalk.

The Board finds mitigation measure TRANSP-2 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant pedestrian and bicyclist crosswalk congestion impacts associated with the Project.

Potential Impact

<u>Impact TRANSP-3</u>: Vehicle traffic generated by the Proposed Project could worsen the Level of Service at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive.

Mitigation Measure

(i) Mitigation Measure TRANSP-3: Implement Mitigation Measure TRANSP-1.

Potential Impact

<u>Impact TRANSP-4</u>: Bicycle and pedestrian traffic generated by the Proposed Project could increase transportation hazards at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive.

(i) Mitigation Measure TRANSP-4: Implement Mitigation Measure TRANSP-2.

Potential Impact

<u>Impact TRANSP-5</u>: Bicycle and pedestrian traffic generated by the Proposed Project could worsen the bicycle and pedestrian safety at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive.

Mitigation Measure

(i) Mitigation Measure TRANSP-5: Implement Mitigation Measure TRANSP-2.

Finding

Implementation of mitigation measures TRANSP-3, TRANSP-4, and TRANSP-5 would ensure the Project would not result in significant level of service impacts, significant increases in transportation hazards, or significant worsening of bicycle and pedestrian safety by requiring the Park District to pay its fair share toward the cost of improvements to institute "Right Turn Only" traffic movements from the Patterson Ranch Road and Commerce Drive approaches during peak commute times and by requiring the Park District to pay its fair share toward the cost of improvements to the pedestrian and bicyclist crosswalk at Paseo Padre Parkway. Compliance with TRANSP-3, TRANSP-4, and TRANSP-5 will mitigate potential Project-related impacts

The Park District Board finds Mitigation Measures TRANSP-3, TRANSP-4, and TRANSP-5 are feasible, adopts such measures, and finds such measures will lessen to an insignificant level the potentially significant impacts associated with Project-related worsening level of service, traffic hazards, and bicycle and pedestrian safety.

UTILITIES

Potential Impact

Impact UTIL-1: Construction and Demolition Debris.

Mitigation Measure

(i) Mitigation Measure UTIL-1: Construction and Demolition Debris:

Prior to completion of the plans and specifications, the Park District shall review the plans to ensure that they include a solid waste recovery plan. This recovery plan shall be in compliance with the Park District's adopted sustainability policy, which is directed at minimizing disposal of solid waste generated during construction in accordance with applicable state and county codes. The recovery plan shall address, at a minimum, recycling of asphalt and concrete paving materials, lumber and metal and concrete pipes and tanks, and balancing graded soil on site to the maximum extent feasible.

Finding

Implementation of mitigation measure UTIL-1 would ensure the Project would not result in significant impacts related to construction and demolition debris. Compliance with UTIL-1 will mitigate potential Project-related impacts

The Park District Board finds Mitigation Measures UTIL-1 is feasible, adopts such measure, and finds such measure will lessen to an insignificant level the potentially significant impacts associated with Project-related worsening level of service, traffic hazards, and bicycle and pedestrian safety.

Chapter 5 Findings for Significant and Unavoidable Effects

The Final EIR identifies the following significant and unavoidable adverse impact associated with the Project, which can be reduced, although not to a less-than significant level, through implementation of mitigation measures identified in the Final EIR. Public Resources Code 21081(a)(1). To the extent that these mitigation measures will not mitigate or avoid all significant effects on the environment, it is hereby determined that this significant and unavoidable adverse impact is acceptable for the reasons specified in Section G below as required by Pub. Resources Code § 21081(a)(3).

Cultural and Tribal Cultural Resources

Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would disturb this historic building on the Project site.

Mitigation Measure CUL-2a: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interior-qualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board. The documentation materials shall be placed on file with the City of Fremont, the Washington Township Museum of Local History, and the Fremont Main Library.

Mitigation Measure CUL-2b: In concert with Mitigation Measure CUL-2a, the Park District shall install an interpretive display or signage for public exhibition concerning the history of the historical resource at the site or provided to local historical societies and libraries.

Finding: Implementation of mitigation measures CUL-1 and CUL-2 are feasible, and the Park District adopts such measures, and finds that these measure will lessen the potentially significant impacts of the Project associated with a change in the significance of an historical resource for the historic Patterson Ranch Labor Contractors Residence, though not to a less-than-significant level. The Park District's Board finds that even with implementation of all feasible mitigation measures, the impact associated with dismantling and removal of the Patterson Ranch Labor Contractors Residence will be a significant and unavoidable impact to cultural resources.

Chapter 6 Mitigation Monitoring and Reporting Program and Environmental Protection Features

As referenced above in the findings, a MMRP has been prepared for the Project and is to be adopted concurrently with

these findings and statement of overriding considerations pursuant to Public Resources Code Section 21081(a)(1). The MMRP is a separate stand-alone document that will be used by the Park District to track compliance with the Project mitigation measures. The MMRP will remain available for public review during the compliance period, which includes preconstruction coordination, construction, and post-construction documentation.

Chapter 7 Alternatives

The Final EIR evaluated four Project alternatives as required by the State CEQA Guidelines §15126.6, which requires an EIR to "describe a range of reasonable alternatives to the project, ...[that] would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects, and evaluate the comparative merits of the alternatives." The purpose of the alternatives analysis is to determine whether a Project alternative would feasibly reduce or eliminate significant impacts, while meeting most of the basic objectives of the proposed LUPA.

The range of alternatives studied in an EIR is governed by the "rule of reason," requiring evaluation of only those alternatives "necessary to permit a reasoned choice." Further, an agency "need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." The analysis should focus on alternatives that are feasible, meaning that they may be accomplished in a successful manner within a reasonable period of time, taking economic, environmental, social, and technological factors into account. Alternatives that are remote or speculative or that do not feasibly meet most of the Project objectives need not be discussed. Furthermore, the alternatives analyzed for a Project should focus on reducing or avoiding significant environmental impacts associated with the Project, as proposed.

As described below, each of the four alternatives evaluated represents a different approach to meeting the Project purpose of restoring habitat, expanding public access on a 306-acre park expansion area, and constructing elements of the Coyote Hills Regional Park Development Plan. In addition to the alternatives evaluated, the Final EIR also discusses several alternatives that were considered but not selected for further evaluation in the alternatives analysis. The Preserve Contractors Residence in Place Alternative was rejected for further evaluation because if the Contractors Residence is restored, it would be substantively similar to other studied alternatives. If the Contractors Residence is never restored or moved, this alternative would be less effective at protecting and/or enhancing cultural resources than the alternatives evaluated. For these reasons, the Preserve Contractors Residence in Place Alternative to the Proposed Project is rejected.

Alternative locations for the Proposed Project were rejected for further evaluation because the Project is specific to the unique conditions of the Project site, which is adjacent to the existing Coyote Hills Regional Park and contains Patterson Slough, a unique but degraded resource that would be restored. In addition, it would be very difficult or impossible to find an undeveloped area of similar size and open space values in the Project vicinity. Alternative locations would fundamentally fail to meet the objectives of the Proposed Project, including integration of the Expansion Area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area managed by California Department of Fish and Wildlife, and the US Fish and Wildlife Service. Therefore, an offsite location as an alternative for the Proposed Project was rejected.

An alternative that would relocate the Proposed Project's 100-car parking lot and picnic area from north of Patterson Ranch Road, and eliminate the proposed Patterson Slough West Spur Trail, was considered. Relocating the 100-car parking lot and picnic area would not be better than the Proposed Project in terms of impacts on biological resources and historic resources. However, unlike the Proposed Project, this alternative would eliminate approximately 1.5 acres of agricultural land. Such a loss of agricultural land would conflict with the Proposed Project's objective of "Providing opportunities for urban agriculture" and may potentially conflict with City of Fremont General Plan Goals, Open Space and Agriculture Easement conditions, and scenic roadway designation of Paseo Padre Parkway. Therefore, this alternative for the Proposed Project was rejected for further evaluation.

The Park District's Board of Directors finds that these alternatives are infeasible because they would not meet the basic Project objectives of: protecting and/or enhancing cultural resources, integrating the Expansion Area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area, and providing opportunities for urban agricultural.

The Final EIR evaluated the following four alternatives to the Project:

- The **No Project alternative**, which assumes the continuation of existing conditions within the Project sites. There would be no visitor serving facilities or trails constructed that would allow public access and use of the site. No habitat restoration, enhancement, and wildlife management, or vegetation and pest management would occur. The existing archaeological resources and human remains on the site would not be disturbed. The existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition, and would be subject to deterioration as time passes. No utility upgrades and extensions, or climate change and sea level rise adaptation, would occur on the site.
- The **Restore Contractors Residence in Place Alternative**, which would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would remain in its current location, and be restored in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitating Historic Buildings (1995). To properly stabilize the Contractors Residence for restoration, the building's foundation would require repair and reconstruction. This would involve mobilization of heavy equipment in the vicinity of the structure in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six to eight month period.
- The **Relocate and Restore Contractors Residence Alternative**, would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would be relocated to the Farm Yard Agricultural Unit, to a site that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitating Historic Buildings (1995). Moving the Contractors Residence would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer.
- The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative, would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Like the Proposed Project, this alternative would involve dismantling of the Contractors Residence with hand tools. Unlike the Proposed Project, the Contractors Residence would be relocated at a site in the Farm Yard Agricultural Unit that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitating Historic Buildings (1995). Compared to the other alternatives discussed above, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would involve more work done by hand, and would take longer.

In preparing these findings, the EBRPD Board of Directors has reviewed the significant impacts associated with each of the alternatives and has compared them with the significant impacts associated with the Project. The Board has also considered the feasibility of each alternative, taking into account a range of economic, environmental, social, legal, and other factors. The Board concludes that each of these alternatives is infeasible and/or less desirable than the Project. The Board's analysis and conclusions with respect to these alternatives are described below.

NO PROJECT ALTERNATIVE

The CEQA-required No Project alternative assumes that the Project would not be developed and that the site would remain in its existing condition. Because this alternative would result in: no visitor serving facilities or trails; no habitat restoration/enhancement, wildlife management, or vegetation and pest management; no utility upgrades and extensions; and no climate change and sea level rise adaptation the No Project alternative would not achieve any of the objectives of the proposed Project. Specifically, it would not ensure integration of the Expansion area with the existing Regional Park facilities (Objective 1), would not protect and/or enhance biological resources and cultural resources (Objectives 2 and 3), would not provide for public safety, cultural and biological resource preservation at Coyote Hills through the removal of

the deteriorated Contractors residence, which has become an attractive nuisance and fire and public safety hazard and encroaches into sensitive cultural and biological resource areas (Objective 4), would not remove the Contractors residence in a way that balances resource protection with a wise use of public resources in a timely manner (Objective 5), would not protect and manage surface and ground water resources (Objective 6), would not provide expanded opportunities for urban agriculture (Objective 7), would not provide recreation and environmental education activities (Objective 8), would not. develop the expansion area to be adaptable to climate change (Objective 9), would not implement improvements that would be durable and lower the Park District's operating costs (Objective 10), and would not provide opportunities for climate change education (Objective 11). Therefore, the EBRPD Board of Directors rejects the No Project alternative as infeasible and less desirable than the Project.

RESTORE CONTRACTORS RESIDENCE IN PLACE ALTERNATIVE

The Restore Contractors Residence in Place Alternative would be the same as the Proposed Project in all respects except that the Contractor's residence would remain in its current location. To properly stabilize the Contractor's house for restoration in place, the building's foundation will need repair and reconstruction. Use of heavy equipment over the resource area in order to lift the building for foundation repair and contractor vehicle traffic bringing in labor, equipment and materials over the 6-8 month construction period would result in considerable damage to the underlying sub-surface cultural resources.

In addition, the Contractors Residence is located in the most sensitive and biologically important part of the Project area, adjacent to Patterson Slough. The heavy equipment required for the foundation repair could damage sensitive biological resources in the Patterson Slough Natural Unit near the Contractors Residence. Therefore, the Restore Contractors Residence in Place Alternative would be less beneficial than the Proposed Project for both cultural and biological resources.

This alternative would also result in impacts worse than the proposed Project in the areas of tribal cultural resources, air quality, geology and soils, greenhouse gas emission, hazards and hazardous materials, hydrology and water quality, and noise. No other impacts would be reduced compared to the Project. The Restore Contractors Residence in Place Alternative would not meet Project objectives related to protecting and/or enhancing cultural resources and biological resources (Objective 2) and to providing for public safety and cultural and biological resource preservation through removal of the residence (Objective 4), removing the Contractors residence in a way that balances resource protection with a wise use of public resources in a timely manner (Objective 5) and implementing improvements that would be durable and lower the Park District's operating costs (Objective 10) to the same extent as the proposed Project.

In addition, the Restore Contractors Residence in Place Alternative would not avoid or minimize environmental impacts to the same extent as the proposed Project. The Project proposes removal of the Contractors Residence because it is located immediately adjacent to willow-lined Patterson Slough, which is an area of high biological and cultural resources sensitivity. This alternative would result in disturbance to buried cultural resources as described above and would preclude restoration of sensitive biological resources. Therefore, this alternative would result is increased impacts to sensitive biological and cultural resources compared to the proposed Project.

The EBRPD Board of Directors finds that the Restore Contractors Residence in Place Alternative would not meet the Project objectives to the same extent as the proposed Project, and would not avoid or minimize environmental impacts to the same extent as the proposed Project, and therefore rejects this alternative as infeasible and less desirable than the Project.

RELOCATE AND RESTORE CONTRACTORS RESIDENCE ALTERNATIVE

The Relocate and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except that the Contractors Residence would be relocated to the Farm Yard Agricultural Unit, to a site that is not underlain by sensitive cultural resources, and restored in its new location. Moving the Contractors Residence would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer, and similar to the Restore Contractors Residence in Place Alternative, this alternative is expected to cause damage to the underlying buried cultural resources.

This alternative would also result in impacts worse than the proposed Project in the areas of tribal cultural resources, aesthetics, air quality, biological resources, geology and soils, greenhouse gas emission, hazards and hazardous materials, hydrology and water quality, and noise. No other impacts would be reduced compared to the Project.

The Relocate and Restore Contractors Residence Alternative would achieve some of the Park District's Project objectives (specifically, Objectives 1, 3, 4, 6, 7, 8, 9 and 11) but would not meet the objectives relating to: protecting and enhancing cultural resources (Objective 2), removing the Contractors residence in a way that balances resource protection with a wise use of public resources in a timely manner (Objective 5), and designing improvements to reduce park operating cost (Objective 10). Relocating the Contractor's Residence would be significantly more expensive, and thus less cost effective, than dismantling the structure. The cost for relocation and design, construction, and materials for restoring such a structure would be prohibitive and far greater than for implementation of the proposed Project. The added cost of relocation and restoration would divert resources away from other Project components, including restoration, recreation or visitor serving facilities, and native American cultural resources interpretation. For these reasons, this alternative would not support Objectives 2, 5, and 10 which aim to protect and enhance cultural resources, promote the wise use of public resources, and minimize park operating costs.

HAND DISASSEMBLE, RELOCATE, AND RESTORE CONTRACTORS RESIDENCE ALTERNATIVE

The EBRPD Board of Directors finds that the Relocate and Restore Contractors Residence Alternative would not meet the Project objectives to the same extent as the proposed Project, and would not avoid or minimize environmental impacts to the same extent as the proposed Project, and therefore rejects this alternative as infeasible and less desirable than the Project.

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the same as the proposed Project except in its treatment of the historic Contractors Residence. Like the Proposed Project, this alternative would involve dismantling of the Contractors Residence with hand tools. Unlike the Proposed Project, the Contractors Residence would be relocated to an area not underlain by sensitive cultural resources, and restored in the new location. Compared to the other alternatives, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would involve more work done by hand and would take longer. The dismantling of the structure would result in the loss of some structure materials, but much of the material would be salvaged for reuse. There would be no need for heavy equipment to drive onto the elevated ground where the building is located.

This alternative would result in reduced impacts to historic architectural resources and land use planning compared to the proposed Project but worse impacts than the proposed Project in the areas of aesthetics, air quality, geology and soils, greenhouse gas emission, hazards and hazardous materials, hydrology and water quality, and noise. No other impacts would be reduced compared to the Project.

The Disassemble, Relocate, and Restore Contractors Residence Alternative would achieve some of the Park District's Project objectives (specifically, Objectives 1, 2, 3, 4, 6, 7, 8, 9 and 11) but would not meet the objectives relating to: removing the Contractors residence in a way that balances resource protection with a wise use of public resources in a timely manner (Objective 5) and implementing improvements that would be durable and lower the Park District's operating costs (Objective 10) to the same extent as the proposed Project.

The EBRPD Board of Directors finds that the Disassemble, Relocate, and Restore Contractors Residence Alternative would not meet the Project objectives to the same extent as the proposed Project, and would not avoid or minimize environmental impacts to the same extent as the proposed Project, and therefore rejects this alternative as infeasible and less desirable than the Project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The Final EIR identified the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative as the Environmentally Superior Alternative. However, while the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would avoid the impact to historic architectural resources, it would not achieve the objectives of removing the residence in a way that balances cultural and biological resources with wise use of public resources in a timely manner (Objective 5) or the objective of designing improvements to reduce park operating cost (Objective 10). A determination of which environmental condition is superior depends on a value decision about whether historic resource protection or protection of tribal cultural and biological resources while ensuring wise use of public resources is a higher priority environmental outcome.

Chapter 8 Statement of Overriding Considerations

The Final EIR identified a significant and unavoidable impact to historic resources that can be lessened with the implementation of mitigation measures but not to a less-than-significant level. The impact would result from the disassembling of the historic Patterson Ranch Labor Contractors Residence and reuse of the materials salvaged from the building to construct an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

As a result, pursuant to Section 15093, the Park District must "balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks, when determining whether to approve the project." Those specific reasons to support an action taken by the Park District must be included in a written statement of overriding considerations that is supported by substantial evidence within the administrative record.

The Park District's Board finds that the Project would provide the following benefits:

- The Project would provide new and expanded Regional Park facilities so more members of the public could use the regional park.
- The Project would protect known tribal cultural resources.
- The Project would protect and enhance sensitive biological habitats and protect sensitive biotic resources in the Patterson Slough area as well as other wetland areas.
- The Project would improve and add new outdoor recreation activities, including hiking and bicycling trails, thereby increasing opportunities for physical fitness and improving connectivity through Coyote Hills Regional Park.
- The Project would improve and provide wildlife viewing, picnicking areas, environmental education opportunities and other park amenities (e.g., parking and restrooms) for the public to use.
- The Project would incorporate native American cultural resource and historic resource education and interpretation for public areas, and would provide educational panels and information to highlight the roles of the Ohlone people and culture as well as the site's agricultural history.
- The Project would provide educational opportunities, including wildlife observation platforms, Climate Smart agricultural elements, and educational panels.
- The Project would preserve historic agricultural uses on the site and may include rehabilitation of the Patterson Ranch Milk House building for agricultural related uses as park amenities (i.e., farm stand).
- The Project would provide a more cost-effective solution regarding the historic Contractors Residence than would the restoration alternatives, thereby enabling the Park District to allocate resources to the other items identified above and below.
- The Project would implement much-needed improvements related to flood control, storm water management, and groundwater protection facilities.
- The Project would implement sea level rise adaption strategies to ensure the Park's resiliency with anticipated climate change.
- Having balanced the benefits of the Project against its significant and unavoidable historic resources impact, the District's Board finds that the benefits of the Project outweigh the significant and unavoidable environmental effects related to the loss of a historic resource. Therefore, the adverse effects are acceptable given the importance of this Project to the overall mission of the Park District to provide "open space, parks, trails, safe and healthful recreation and environmental education." The Park District Board further finds that each of the Project benefits discussed above is a separate and independent basis for these findings.

Chapter 9 Statement of Location and Custodian of Documents

Public Resources Code 21081.6(a)(2) requires the Park District, as the Lead Agency, specify the location and custodian of the documents of other materials that constitute the record of proceedings upon which its decision has been based. The following location is where review of the record may be performed:

East Bay Regional Park District Administrative Office 2950 Peralta Oaks Court; Oakland, CA 94605

The Park District's Board has relied on all the documents contained within the record of proceedings in reaching its

decision on the Project.

Chapter 10 Recirculation Not Required

No significant new information was added to the Final EIR as a result of the public comment process. The Final EIR responds to comments, and clarifies, amplifies, and makes insignificant modifications to the Draft EIR. It does not identify any new significant effects on the environment or a substantial increase in the severity of an environmental impact requiring major revisions to the Draft EIR. Therefore, recirculation of the EIR is not required.

Chapter 11 Incorporation by Reference

These findings incorporate the text of the Final EIR for the Project by reference and in their entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, the determination of the environmentally superior alternative, and the reasons for approving the Project in spite of the potential for a significant and unavoidable adverse impact.

Chapter 12 Conclusion

Based on the Findings and the information contained in the record, the Park District's Board has found that each of the potentially significant effects of the Project are mitigated to a less-than-significant level by the changes or alterations that have been required in, or incorporated into the Project with the exception of the significant and unavoidable impact to historic resources from the dismantling and removal of the Patterson Ranch Labor Contractors Residence, for which the Park District Board will adopt a Statement of Overriding Considerations. Based on the foregoing Findings and the information contained in the record, it is determined that none of the Project alternatives is feasible or desirable.

MITIGATION MONITORING AND REPORTING PROGRAM

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the proposed Coyote Hills Restoration and Public Access Project. The MMRP reflects the Draft and Final EIR analysis of impacts and mitigation measures.

The purpose of the MMRP is to ensure the implementation of mitigation measures identified as part of the environmental review for the Project. The MMRP includes the following information:

- ♦ A list of impacts and their corresponding mitigation measures.
- The party responsible for implementing the mitigation measures.
- The timing and procedure for implementation of the mitigation measure.
- ♦ The agency responsible for monitoring the implementation.
- The timing or frequency of monitoring activities.

Public Resources Code sec. 21081.6(a) requires an agency to adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of Project approval. The East Bay Regional Park District would adopt this MMRP, or an equally effective program, if it approves the proposed Project with the mitigation measures included in the EIR.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
	HETICS					
Aestheti	iect would not result in significant Project or cumulative impacts related to cs; therefore, no mitigation measures are required.					
	UALITY					
(BMPs) control	on Measure AIR -1: The following Best Management Practices shall be included in the Project construction dust/emission plan with a designated contact person for on-site entation:	Compliance with BMPs	Construction Contractor	During construction	EBRPD Construction Manager	During project construction
1.	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.	Plan for equipment emissions (Table 8.3 Item #10)	Construction Contractor	Prior to construction	EBRPD Construction Manager	Prior to and during project construction
2.	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.					
3.	All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.					
4.	All vehicle speeds on unpaved roads shall be limited to 15 mph.					
5.	All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.					
6.	A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Park District's phone number shall also be visible to ensure compliance with applicable regulations.					

	Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
Quality Quality	llowing measures, contained in Table 8-3 of the Bay Area Air Management District's May 2017 California Environmental Act Guidelines, also shall be included in the Project action dust/emission control plan:					
1.	All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.					
2.	All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.					
3.	Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.					
4.	Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.					
5.	The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.					
6.	All trucks and equipment, including their tires, shall be washed off prior to leaving the site.					
7.	Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.					
8.	Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.					
9.	Minimizing the idling time of diesel powered construction					

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
equipment to two minutes.					

10. The project shall develop a plan demonstrating that the offroad equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, lowemission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.

11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).

12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.

13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
BIOLOGICAL RESOURCES					
 <u>Mitigation Measure BIO-1a, Project-wide: General Conservation</u> <u>Measures to Protect Habitat for All Special Status Wildlife Species.</u> The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status wildlife species. Prior to conducting work and during work in sensitive biological communities and Special Status species habitats, including work within 100 feet of Patterson Slough, and within or near jurisdictional wetlands, the following measures will be implemented. A qualified, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) approved Biological Monitor (Qualified Biologist) shall be present to observe work and shall have the authority to halt work as necessary if permit conditions are being violated. 	Construction observation by biologist, stockpiling of soils in areas lacking native vegetation, avoidance of introduction of exotic plant species, control of use of herbicides and rodenticides, avoidance of introduction of soil- borne pathogens, construction equipment speed limit	Qualified Biologist	During construction	EBRPD Stewardship Manager	During construction
 Pre-construction biological surveys appropriate to Special Status wildlife species will be conducted by the Qualified Biologist prior to initiation of construction. Before any construction activities begin on the Project, the Qualified Biologist shall conduct a training session for construction workers, and Park personnel involved in construction of the Project. The training shall include a description of each Special Status species that might occur and their respective habitats, including wetlands, the general measures that are being implemented to protect each of the species as they relate to the Project, and the physical boundaries within which the Project shall be accomplished. The training should also provide instruction in the appropriate 	Pre-construction surveys, worker training, delineation of construction boundaries, temporary wildlife fences or approval of disturbance and clearing of affected area, biological monitor during installation of wildlife fences	Qualified Biologist	Prior to construction	EBRPD Stewardship Manager	Prior to construction
protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers.Before starting ground disturbing activities within construction	Inspection of wildlife exclusion fences and repair as needed	Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
areas, the Park District and its Construction Contractors shall clearly delineate the boundaries of the construction area with fencing, stakes, or flags. Contractors shall be required to restrict construction-related activities to within the fenced,	Removal of wildlife exclusion fences	Construction Contractor	Upon completion of construction in area	EBRPD Stewardship Manager	Upon completion of construction in area

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
 staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of construction-related activities in that area. Fencing stakes and flags shall be removed upon completion of construction work. Sensitive habitat areas, including Special Status wildlife species habitat and known populations, and jurisdictional wetlands, shall be clearly indicated on the Project construction plans. To prevent Special Status wildlife species from moving through the construction area, the Park District or its 	Survey of fenced exclusion areas, monitoring of vegetation removal	Qualified Biologist	Survey immediately prior to conducting vegetation removal or grading activities; monitoring during construction	EBRPD Stewardship Manager	Survey immediately prior to conducting vegetation removal or grading activities; monitoring during construction
Construction Contractors shall install temporary wildlife exclusion fencing. Final fence design, including appropriate animal escape structures within the fencing and fence location, shall comply with permit conditions, as appropriate for each species being protected. Any construction-related disturbance	Remediation of project- related erosion	Construction Contractor	Immediately upon discovery	EBRPD Stewardship Manager	During construction
outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval of the Qualified Biologist. New trails, bridges, or other structures shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or	Halt construction in vicinity if Special Status species are found during construction, reporting Special Status species to USFWS and CDFW	Qualified Biologist	As needed during construction	EBRPD Stewardship Manager	As needed during construction
existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used which the provide general of the Oralifed	Daily Monitoring report by biologist	Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
to being used, subject to review and approval of the Qualified Biologist.Where wildlife exclusion fencing is not installed and ground disturbing activity is occurring, the Qualified Biologist will approve the proposed disturbance in advance and clear the	Covering steep-walled holes and trenches, inspection for trapped animals	Construction Contractor, Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
A USFWS-approved and/or CDFW-approved Biological Monitor should be on-site during installation of the fencing to	Contacting USFWS and/or CDFW if listed species are trapped	Qualified Biologist	As needed during construction	EBRPD Stewardship Manager	As needed during construction

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Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
any Special Status wildlife outside the construction area. The fencing shall be inspected by the qualified Biological Monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. After construction has been	Inspection of pipes, culverts and other structures before movement or burial	Qualified Biologist	Before movement or burial of pipes, etc.	EBRPD Stewardship Manager	Before movement or burial of pipes, etc.
 completed, the exclusion fencing shall be removed within 72 hours. Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Qualified 	Consultation with resource agencies, movement of pipe	Qualified Biologist	As needed during construction	EBRPD Stewardship Manager	As needed during construction
Biologist or a Qualified Biologist working under their direction shall survey within the exclusion area to ensure that no Special Status species are present. The Qualified Biologist or a Qualified Biologist working under their direction shall also	Inspection of contractor equipment for leaks and repair as needed	Construction Contractor	Daily during construction	EBRPD Stewardship Manager	Daily during construction
 monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of Special Status species. Excavated soils shall be stockpiled in disturbed areas lacking native vegetation, and/or as shown on the Construction Plans, 	Notify Qualified Biologist of hazardous spills, cleanup of spills	Construction Contractor	As needed during construction	EBRPD Stewardship Manager	As needed during construction
or approved by the Qualified Biologist.All detected erosion caused by Project-related impacts (i.e., grading or clearing for new trails) and other improvements	Return of temporarily disturbed areas to pre- project conditions	Construction Contractor	Upon completion of construction	EBRPD Stewardship Manager	Upon completion of construction
 shall be remedied immediately upon discovery. The introduction of exotic plant species shall be avoided first through prevention, followed by physical or chemical methods. Construction equipment shall arrive at the Project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Weed-free rice straw or other certified weed free straw shall be used for erosion control. Earth-moving equipment, gravel, fill, or other materials will be weed-free. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter or other debris or seed-bearing material before entering the Park or from an area with known infestations of invasive plants and noxious weeds. Weed 	Post-construction biological monitoring report	Qualified Biologist	Within one month of completion of construction	EBRPD Stewardship Manager	Within one month of completion of construction

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by the Qualified Biologist.					
• Use of herbicides as vegetation control measures shall be used in compliance with the Park District's IPM policies and Best Management Practices (BMPs). All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation, as well as additional Project-related restrictions deemed necessary by the CDFW and/or USFWS, and included in the permit conditions. No rodenticides shall be used.					
• The introduction of soil-borne pathogens shall be avoided by following the Park District's Pathogen Controls Best Management Practices.					
• If Special Status wildlife species are found within or near construction areas during Project construction work, construction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the Project area (if possible). The wildlife resource agency(ies) with jurisdiction over the species shall be contacted regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the Qualified Biologist shall document the activities of the animal within the site; fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the Park District and the appropriate regulatory agency with jurisdiction over the wildlife species.					
• Uncommon or previously undocumented Special Status wildlife species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).					

	Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
•	Whenever possible, steep-walled holes or trenches shall be covered each evening to prevent animal entry. If this is not possible and the steep-walled holes or trenches must be left open overnight, escape ramps or structures shall be installed. Steep-walled holes or trenches shall be inspected for trapped animals on a daily basis until they are back-filled. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted immediately to determine the appropriate method for relocation, . The Qualified Biologist may elect to order a stop work requirement if they determine it to be necessary, and upon consultation with the appropriate regulatory agency.					
	• Construction pipes, culverts, or other structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for Special Status species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Special Status species is discovered inside a pipe, and does not move of its own accord, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.					
	• Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The Qualified Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an appropriate facility. If vehicle or equipment maintenance is					

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
necessary, it may be performed in the designated staging areas, as shown on the Construction Plans or approved by the Qualified Biologist.					
• Temporarily disturbed areas shall be returned to pre-project conditions or better.					
• Project-related vehicles should observe a 15-mile-per-hour speed limit on unpaved access roads within the limits of construction.					
Documentation of compliance, as required by any regulatory permit conditions, with applicable state and federal laws pertaining to the protection of Special Status wildlife and native and migratory birds and raptors shall be recorded in a daily monitoring report and made available to the CDFW as part of a post construction biological monitoring report.					
 <u>Mitigation Measure BIO-1b, Project-wide: Prepare and Implement a</u> <u>Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or</u> <u>Permanent Impacts to the Habitat of Special Status Species and</u> <u>Jurisdictional Wetlands:</u> The Park District shall implement the following mitigation measure to restore or compensate for habitat, including Special Status habitat and jurisdictional wetland areas disturbed or impacted by Project actions. To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit 	Preparation of HHMP, preconstruction surveys	EBRPD (for Patterson Slough and Western Wetlands Natural Units, Ranch Road Recreation Unit, and Historic Patterson Farm Agricultural Unit); ACFCWCD (for Southern Wetlands Natural Unit)	Prior to construction	EBRPD Stewardship Manager	Prior to construction
conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for implementing the Plan. The Plan shall include by proportionate amounts, specific	Restoration of temporarily disturbed areas	Construction Contractor	After temporary disturbance	EBRPD Stewardship Manager	After temporary disturbance
habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed riparian, willow sausal, seasonal wetlands, etc).	Reporting for HHMP	Qualified Biologist	Annually for the first five years and every other year	EBRPD Stewardship Manager	Annually for the first five years and every other
• The Park District shall, prior to construction, have a qualified botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional			for years six through ten. If all performance		year for years six through ten. If all performance

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
preconstruction surveys of the areas as needed to document			standards have		standards have
baseline vegetation composition, species occurrence, vegetation			been met at year		been met at year
characterization (tree diameter size, etc.), percent cover of plant			seven, the		seven, the
species, and comply with botanical survey requirements of			monitoring and		monitoring and
Mitigation Measure BIO-1c			reporting can be		reporting can be
East Bay Regional Park District shall be the responsible party for			concluded.		concluded.

- preparation and implementation of the HMMP for work/impact mitigation within the Patterson Slough and Western Wetlands Natural Units, the Ranch Road Recreation Unit, and the Historic Patterson Farm Agricultural Unit. Alameda County Flood Control and Water Conservation District (ACFCWCD) shall be the responsible party for HMMP implementation within the Southern Wetlands Natural Unit. Achievement of performance standards shall be based on comparison with impacted sensitive habitat, as required by regulatory permits for the project. Reference sites of impacted sensitive habitat shall be surveyed for biological resources and documented prior to earthwork.
- Habitat Compensation Measures:

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- Temporarily disturbed ruderal areas shall be stabilized to control erosion and dust production prior to restoration or enhancement.
- Disturbed or impacted wetlands shall be compensated at a 2:1 ratio.
- Disturbed or impacted areas containing rare or Special Status plants that cannot be avoided shall be compensated at a 3:1 ratio.
- Disturbed or impacted mixed riparian and oak woodland plant communities located within Patterson Slough shall be compensated for at a 3:1 ratio. Work includes reseeding, replanting, and weed control using PM methods.
- Performance Standards:
 - Existing ruderal/disturbed areas shall have a minimum 70% cover of grasses and forbs within one year of

	Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
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0	Willow and mixed riparian forest areas that provide compensation for disturbance to their habitats shall have a minimum 50% native plant survival and have achieved a minimum 60% canopy cover within ten years of planting. Interim success criteria shall be established to determine if intervention is necessary to achieve a 70% cover.					
0	Invasive plants that are listed as High invasive threat by the California Invasive Plant Council (Cal-IPC), exclusive of non-native grasses, shall not exceed a 5% cover after seven years.					
Monit	oring and Reporting:					
m sa st cc sa ve al cc th ra th ra sp	Ionitoring will include a combination of photographic conitoring from permanent photo points and random impling of the vegetative community using a one-square yard impling frame (quadrat) at permanent vegetation monitoring ations within each target vegetation community, including ontrol sites for each vegetation community. Permanent impling locations will be located with posts within each egetation community following completion of final grading, eeding, and planting. One permanent sampling location will so be established within each reference vegetation ommunity located within the project area. Plant species and heir absolute percent (%) cover will be recorded within three andomly located quadrats at each sampling location, including the reference vegetation communities. Sampling will occur ince per year at the end of the wet season, typically in late oring or early summer (May-June) or as timing corresponds ith the time when the majority of species will be identifiable.					
	eporting shall occur at years 1, 3, 5, 8 and 10 following					

o Reporting shall occur at years 1, 3, 5, 8 and 10 following

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
construction. If performance standards have been met at year five, the monitoring and reporting can be concluded.			Ē		
Remedial Measures and Contingencies:					
• If the annual monitoring of percent survival and cover indicate that target performance and success criteria, or if health and vigor observations so indicate, and as determined by the Qualified Biologist remedial measures shall be undertaken. These can include re-seeding, mulching, irrigation, replanting, pest control, or relocating target vegetation cover as necessary to achieve the performance criteria. Native plants determined to not be successful may be substituted using comparable native trees, shrubs, vines, and herbaceous species that have demonstrated successful growth and establishment.					
Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species: The Park District, its Construction Contractors, and restoration and maintenance personnel will implement measures to avoid and minimize potential adverse effects on Special Status plants, with a special focus on the Southern Wetlands Natural Unit. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.	Botanical surveys, mapping of Special Status plants, establishment buffers as needed, reporting to USFWS and CDFW	Qualified Botanist	Prior to construction, at appropriate time of year	EBRPD Stewardship Manager	Prior to construction
 A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants (USFWS, 2000) and CDFW Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (CDFG, 2000). The 	Establishment of buffers as needed, including fences and access restrictions, restriction of grading and other disturbance	Construction Contractor, Qualified Botanist	Prior to construction	EBRPD Stewardship Manager	Prior to construction
Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose	Collection and relocation of Special Status plants, if needed	Qualified Biologist and Park District biologists	Prior to construction in affected areas	EBRPD Stewardship Manager	Relocation prior to construction in affected areas; monitoring annually for five

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results. and consultation with CDFW			Ţ		years
• Locations of Special Status plants in proposed construction areas will be recorded by the qualified Botanist using a global positioning system (GPS) unit, and flagged in the field. The GPS data will be used to create digital and hardcopy maps for distribution to construction inspectors and contractors to inform them of areas where disturbance is prohibited, or where activities are restricted.					
• If initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species.					
• Access may be restricted around Special Status plant populations through appropriate field direction by the Qualified Botanist. This may include signage, buffers, seasonal restrictions, and design or no access, depending on the Special Status species in question.					
• The Park District and its Construction Contractors shall install a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any Qualified Botanist-required buffer areas to prevent encroachment by construction equipment and personnel. The Qualified Botanist will determine the exact location of the fencing. The fencing will be strung tightly on posts set at maximum intervals of 10 feet (3 meters), and will be checked and maintained weekly until all construction is complete in the area where Special Status plant species occur.					
• No grading clearing storage of equipment or machinery or					

• No grading, clearing, storage of equipment or machinery, or

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
other disturbance or construction activity will occur until all temporary construction fencing has been installed by the Park District, and its Construction Contractor, and inspected and approved by the Qualified Botanist.					
 Special Status plant species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB). 					
• If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 3:1 ratio based on the area of lost habitat (accurately field measured) or as determined by the Qualified Biologist and Park District biologists, in consultation with CDFW, which has review and approval authority over a Rare Plant Mitigation Plan/Habitat Mitigation and Monitoring Plan. Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas. Restoration or reintroduction may be located on-site (i.e., within the project footprint or local vicinity) or at a nearby suitable off-site area within Coyote Hills Regional Park with suitable soil and hydrologic conditions for that species. At a minimum, the Special Status plant mitigation areas shall meet the following performance standards by the fifth year after mitigation planting/seeding; as determined by monitoring, as follows.					
• The compensation area shall be at least the same size as the impact area.					
 Invasive species cover shall be less than or equal to the invasive species cover in the impact area. 					
 Restored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years. 					

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Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
 The final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the project Habitat Mitigation and Monitoring Plan (HMMP) see BIO-1b. 					

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
 Mitigation Measure BIO-1d, Species-Specific: Conservation Measures to Protect Special Status Birds, Migratory Birds, and Raptors: If ground disturbance activities or impacts occur during the breeding season (approximately February 1 through August 31), pre-construction nesting migratory birds, raptors and other Special Status bird species surveys shall be conducted by a Qualified Biologist. Such surveys shall include but not be limited to the following: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act, or by their status as a protected species or Species of Special Concern. 	Surveys, establishment of buffers if needed	Qualified Biologist	Surveys within 14 days prior to ground disturbance during breeding season (February 1 - August 31); buffer if needed prior to construction	EBRPD Stewardship Manager	Surveys within 14 days prior to ground disturbance during breeding season (February 1 - August 31); buffers prior to and during construction
• The pre-construction surveys shall occur within 14 days prior to the ground disturbance and vegetation removal activities. Surveys should be conducted within suitable nesting habitat within 200 feet of the area to be disturbed.					
• If the survey does not identify any nesting migratory birds, raptors and other Special Status bird species in the areas potentially affected by the proposed activity, no further action is required. If nesting migratory birds, raptors and other Special Status bird species are found to occur that might be impacted by Project activities, a "no disturbance buffer" will be established around the habitat area. The Qualified Biologist will consult with CDFW to determine the size of the no-disturbance buffer, which will be marked off with temporary orange construction fencing. This buffer may vary depending on habitat characteristics and the species.					
<u>Mitigation Measure BIO-1e, Species-Specific: Conservation Measures to</u> <u>Protect Habitat for Salt Marsh Harvest Mouse:</u> Additional project- specific avoidance and minimization measures for salt marsh harvest mouse (SMHM) in areas within 200 feet of suitable habitat, such as saline seasonal wetlands near Patterson Ranch Road (pickleweed	Vegetation removal near suitable habitat, installation of exclusion fencing	Construction Contractor, Qualified Biologist	Prior to construction	EBRPD Stewardship Manager	Prior to construction

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
dominated areas) would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail. These measures would be consistent with those required by USFWS and CDFW, and as specified in any permit conditions. They are likely to include the following:	Check equipment and materials stockpiles for Special Status wildlife	Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
• Removal of vegetation where needed in areas near suitable habitat under the supervision of an agency-approved Qualified Biologist using approved methods.					
• Upon verifying work zones are mouse free by a Qualified Biologist, Install species-appropriate Environmentally Sensitive Area (ESA) wildlife exclusion fencing prior to initiation of construction in potential mouse habitat areas. Exclusion fencing for Salt Marsh Harvest Mouse shall be designed with agency approved doors to allow escape of trapped mice and have a "no climb" design to ensure mice do not climb over the fence once installed.					
• Check in, under and around equipment and material stockpiles for Special Status wildlife on a daily basis each morning, prior to initiation of work.					
 <u>Mitigation Measure BIO-1f, Species-Specific: Conservation Measures to</u> <u>Protect Habitat for California Black Rail during Breeding Season:</u> Project specific avoidance and minimization measures for California black rail in areas within 200 feet of suitable habitat, such as saline seasonal wetlands, would be implemented during proposed work along Patterson Ranch Road and the Tuibun 	Surveys	Qualified Biologist	Each year prior to construction that may affect black rails, between February and March	EBRPD Stewardship Manager	Each year prior to construction that may affect black rails Prior to construction each year
 Trail, consistent with those required by the USFWS and -CDFW as specified in any permit conditions. Protocol level surveys would be conducted in suitable habitat for California black rail that are within 200 feet of Project "Limits of Work" or as directed in any agency permit conditions. Surveys will be completed prior to initiation of construction each year of proposed construction activity that may potentially impact black rails. 	Establishment of setback, buffers, and work schedules	Qualified Biologist, CDFW	Prior to construction each year	EBRPD Stewardship Manager	Prior to construction each year

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
 Protocol surveys would be conducted around dawn and/or dusk between February and March when black rails are most likely to vocalize during their breeding season. 					
• If active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows.					
 <u>Mitigation Measure BIO-1g, Species-Specific: Conservation Measures</u> to Protect Habitat for Burrowing Owl: Burrowing owl surveys will be completed by a CDFW- approved Qualified Biologist for those portions of the Project 	Surveys	Qualified Biologist	Final survey no more than 14 days prior to construction	EBRPD Stewardship Manager	Final survey no more than 14 days prior to construction
area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols establish by CDFW and may require multiple site visits with the final survey completed no more than 14 days prior to initiation of construction activities	Creation of new habitat if needed	See Mitigation Measure BIO-1b	See Mitigation Measure BIO-1b	EBRPD Stewardship Manager	See Mitigation Measure BIO-1b
• Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols.	t 1 1 t				
Mitigation Measure BIO-1h, Species-Specific: Conservation Measures to Protect Western Pond Turtle: A qualified Biologist approved by the CDFW shall conduct a preconstruction biological survey for Western Pond Turtle (WPT). The survey area shall include those portions of Crandall Creek (Line-K), Ardenwood Creek (Line-P), DUST Marsh, and Patterson Slough where construction disturbance could occur, or within 500 feet of all such construction activity. The surveys shall be conducted 48 hours prior to initial construction disturbance. Any identified WPT shall be relocated, by a Qualified Biologist, to a suitable	Survey, relocation if needed	Qualified Biologist	48 hours prior to initial construction disturbance	EBRPD Stewardship Manager	48 hours prior to initial construction disturbance

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
location approved by CDFW and outside of the Project's construction disturbance boundaries.			ŭ		
Mitigation Measure BIO-1i, Species-Specific: Conservation Measures to <u>Protect Habitat for Bats</u> (along with Implementation of the City of Fremont's Standard Development Plan): In advance of tree removal and	Survey	Qualified Biologist	Prior to tree and structure removal	EBRPD Stewardship Manager	Prior to tree and structure removal
dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:	Establishment of buffer	Qualified Biologist	Prior to tree and structure removal that occurs April 15 – August 31 or October 15 – February 28	EBRPD Stewardship Manager	Prior to tree and structure removal that occurs April 15 – August 31 or October 15 – February 28
• Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, outside of bat maternity	Monitoring tree and structure removal	Qualified Biologist	During tree and structure removal	EBRPD Stewardship Manager	During tree and structure removal
roosting season (approximately April 15 – August 31), and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible.	Procedures for removal of trees and structures	Construction Contractor	During tree and structure removal	EBRPD Stewardship Manager	During tree and structure removal
• If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the Project site where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the Qualified Biologist.	Installation of artificial bat roosts	Construction Contractor, Qualified Biologist, CDFW	Prior to completion of construction work in Contractors residence area	EBRPD Stewardship Manager	Prior to completion of construction work in Contractors residence area
• The Qualified Biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F.					
• Removal of trees with active or potentially active roost sites shall follow a two-step removal process:					
• On the first day of tree removal and under supervision of					

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
the Qualified Biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws.					
 On the following day and under the supervision of the Qualified Biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). 					
 Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the Qualified Biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to roost. To compensate for any loss of bat roosts within Patterson Slough, the Park District shall install artificial bat roosts (bat houses) when an existing bat roost is lost. The artificial bat roost(s) shall be of such a type and quantity as to provide sufficient replacement roosts for all of a displaced colony. All work, including design and location of artificial roosts and other mitigation measures shall be completed by a Qualified Biologist experienced with bats, including conducting bat surveys and preparing bat protection and mitigation plans Where Special Status bats are found to be present, the Qualified Biologist shall consult with CDFW. 					
Mitigation Measure BIO-2a, Project-wide: Minimize Disturbance to <u>Riparian Habitat</u> : For work occurring immediately adjacent to riparian habitat, including willow thickets and adjacent areas of oak woodland, riparian areas shall be clearly delineated with flagging by a Qualified	Delineation of riparian habitat	Qualified Biologist	Prior to construction	EBRPD Stewardship Manager	Prior to and during construction
	Restoration of impacted areas, if needed	Construction Contractor, Qualified Biologist	Prior to completion of construction	EBRPD Stewardship Manager	Prior to completion of construction

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
by construction activities, any temporarily impacted areas shall be restored to pre-construction conditions or better at the end of construction (see below Mitigation Measure BIO-2b :).			U		
Mitigation Measure BIO-2b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Riparian Habitat: If temporary disturbance to riparian habitat within the Project area cannot be avoided, the HMMP discussed in Mitigation Measure BIO-1b, shall be implemented for riparian habitats temporarily impacted by construction activities. The Plan shall outline measures to restore, enhance, improve or re-establish riparian habitats on site.	Restore riparian habitat if needed	See Mitigation Measure BIO-1b	See Mitigation Measure BIO-1b	EBRPD Stewardship Manager	See Mitigation Measure BIO-1b
 Mitigation Measure BIO-3a, Project-wide: Avoid and Minimize Impacts to Wetlands and Waters of the U.S. and of the State: The Project jurisdictional wetland delineation shall be confirmed in coordination with the US Army Corps of Engineers (USACE) and CDFW to determine the extent of 	Confirm wetland delineation	Qualified Biologist, USACE, CDFW	Prior to construction	EBRPD Stewardship Manager	Prior to construction
 Waters of the U.S. and Waters of the State within the Project area to ensure construction footprints and associated construction disturbance areas do not encroach into wetlands. The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the USACE, RWQCB, and CDFW to the extent feasible. 	Design project to avoid/minimize impacts to wetlands	EBRPD Construction Manager	Prior to construction	EBRPD Stewardship Manager r	Prior to construction
Mitigation Measure BIO-3b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Wetlands and Waters of the U.S. and of the State: If temporary disturbance or permanent loss of wetlands cannot be avoided, the HMMP (see Mitigation Measure BIO-1b) shall be implemented for wetlands or waters of the U.S. or of the State impacted by construction activities. The HMMP shall outline measures to restore, improve, or re-establish wetland habitat within Coyote Hills Regional Park to ensure compensatory mitigation requirements for wetland impacts are satisfied. CULTURAL AND TRIBAL CULTURAL RESOURCES	Restore wetlands if needed	See Mitigation Measure BIO-1b	See Mitigation Measure BIO-1b	EBRPD Stewardship Manager	See Mitigation Measure BIO-1b
<u>Mitigation Measure CUL – 1a:</u> The Park District shall retain the Arden Dairy Milk House in its current location to maintain integrity of	Inspect Arden Dairy Milk House	Qualified Historic Architect	Annually	EBRPD Stewardship	Annually

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
location. Annual inspections by Park District maintenance staff shall be conducted each year to assess the building's interior and exterior				Manager	
condition, including weather tightness and vandal resistance. Following inspection, repairs and maintenance shall be conducted as necessary in a timely fashion. Repairs and maintenance activities and prioritization shall be guided by the Secretary of the Interior's <i>Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> or the Secretary of the Interior's <i>Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</i> (1995).	Repair and maintenance of Arden Dairy Milk House	Qualified Historic Architect, EBRPD staff	As needed, within three months of completion of annual inspection	EBRPD Stewardship Manager	Within three months of completion of annual inspection
<u>Mitigation Measure CUL – 1b:</u> If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's <i>Standards for the Treatment of Historic Properties with Guidelines</i> <i>for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> or the Secretary of the Interior's <i>Standards for Rehabilitation and Guidelines for</i> <i>Rehabilitating Historic Buildings</i> (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont. A Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code.	Restoration and/or adaptive reuse	Qualified Historic Architect, Construction Contactor	During restoration and/or adaptive reuse	EBRPD Stewardship Manager	During restoration and/or adaptive reuse
	Historic Architectural Review, Conditional Use Permit	Qualified Historic Architect	Prior to restoration and/or adaptive reuse	EBRPD Stewardship Manager	Prior to restoration and/or adaptive reuse
Mitigation Measure CUL-2a: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interior- qualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board. The documentation materials shall be placed on file with the City of Fremont, the Washington Township Museum of Local History, and the Fremont Main Library.	Document Contractors residence, file documentation materials	Qualified Historic Architect	Prior to disassembly or demolition	EBRPD Stewardship Manager	Prior to disassembly or demolition

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
<u>Mitigation Measure CUL-2b</u> : In concert with Mitigation Measure CUL- 2a, the Park District shall install an interpretive display or signage for public exhibition concerning the history of the historical resource at the site or provided to local historical societies and libraries.	Install interpretive display or signage	Qualified Historic Architect	Within three months of completion of disassembly or demolition	EBRPD Stewardship Manager	Within three months of completion of disassembly or demolition
Mitigation Measure CUL-3a: In order to mitigate potential adverse impacts to Native American cultural objects discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by a qualified Archaeologist meeting the Standards of the Secretary of the Interior. The Archaeologist shall, in accordance with EBRPD Guidelines for Protecting Parkland Archaeological Sites ¹ , identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in accordance with the recommendations of the evaluating Archaeologist in consultation with the East Bay Regional Park District, as Lead Agency, and CEQA Guidelines §15126.4 (b)(3)(C). Such mitigation may include additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that prehistoric human remains might be encountered.	Halt work if cultural objects discovered, evaluate objects, mitigation, Native American monitor	Construction Contractor, Qualified Archaeologist, EBRPD	When cultural objects discovered during construction	EBRPD Construction Manager	When cultural objects discovered during construction
<u>Mitigation Measure CUL-3b:</u> If Native American human remains are discovered during construction, implement Mitigation Measure CUL-5.	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5

¹ East Bay Regional Park District, 1989. Oakland, California.

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
<u>Mitigation Measure CUL-4:</u> The Park District shall be notified if fossils and possible unique geological features are uncovered during construction of the Proposed Project. Work shall halt within 50 feet of the find until the situation can be assessed by a qualified Geologist or Paleontologist. The Geologist or Paleontologist shall identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. Mitigation may include avoidance of the resource; preparation of a treatment plan that could require recordation, collection, and analysis of the discovery; or curation of the collection and supporting documentation in an appropriate depository. All feasible recommendations of the Geologist or Paleontologist shall be implemented.	Halt work, identify and evaluate fossils and possible geological features, mitigation	Construction Contractor, Qualified Geologist or Paleontologist	If fossils or possible unique geological features discovered during construction	EBRPD Construction Manager	Throughout project construction
implemented. <u>Mitigation Measure CUL-5:</u> In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The coroner shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the Park District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The most likely descendant shall have 48 hours after being allowed access to the site to make recommendations for disposition of the remains and associated grave goods.	Stop work in the event of discovery of human remains	Construction Contractor	During construction, if possible Native American human remains are discovered	EBRPD Construction Manager	Throughout construction
	Notify County Coroner, notify NAHC if needed, confer with most likely descendants	EBRPD Construction Manager	During construction, if Native American human remains are discovered	EBRPD Construction Manager	Throughout construction
Mitigation Measure CUL-6a: Implement Mitigation Measure CUL-3a.	See Mitigation Measure CUL-3a	See Mitigation Measure CUL-3a	See Mitigation Measure CUL-3a	See Mitigation Measure CUL-3a	See Mitigation Measure CUL-3a

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
Mitigation Measure CUL-6b: Implement Mitigation Measure CUL-5.	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5	See Mitigation Measure CUL-5
GEOLOGY AND SOILS					
<u>Mitigation Measure GEO-1:</u> Any construction built as a result of the implementation of the Project shall meet the requirements of the current California Building Code Vol. 1 and 2, including the California Building Standards, current edition, published by the International Conference of Building Officials, and as modified by the amendments, additions and deletions as adopted by the City of Fremont, California. Structures already present at the site and planned for reuse as part of the Project should be evaluated for seismic stability in accordance with Fremont General Plan Policy 10-2.5: Removal of Susceptible Structures, and Implementation 10-2.5.A: Seismic Retrofit Programs.	Design project in compliance with building standards, evaluate existing structures planned for reuse for seismic stability	California Registered Geotechnical Engineer or Civil Engineer	As part of final design, review prior to issuance of final grading and building permits	EBRPD Construction Manager	Twice, on building permit issuance and sign-off
Mitigation Measure GEO-2: Design-level Geotechnical recommendations shall be prepared for the Project under the direction of a California Registered Geotechnical Engineer, or Registered Civil Engineer experienced in geotechnical engineering. The Geotechnical recommendations shall be based on the information developed for the site and shall establish the seismic design parameters, as determined by the geotechnical engineer or civil engineer in accordance with requirements of the California Building Code, for improvements to the Project site. The Geotechnical recommendations and design plans shall identify specific measures to reduce the liquefaction potential of surface soils in areas where liquefaction would pose a risk to health and safety in accordance with Public Resources Code Section 2693 (c).	Preparation of design level geotechnical recommendations, including measures for liquefaction potential	California Registered Geotechnical Engineer or Civil Engineer	As part of final design, review prior to issuance of final grading and building permits	EBRPD Construction Manager	Twice, on building permit issuance and sign-off

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
<u>Mitigation Measure GEO-3:</u> In accordance with the Clean Water Act and the State Water Resources Control Board (SWRCB), the Park District for any construction projects that disturb more than one acre shall file a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of construction. The SWPPP shall include specific best	Prepare and implement SWPPP and Notice of Intent	Qualified Stormwater Developer	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to, and periodically during, construction
management practices (BMPs) to reduce soil erosion. This is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).	Prepare and implement Erosion Control Plan	Qualified Stormwater Developer and Practicioner, Contractor	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to, and periodically during, construction
Additionally, any construction activities planned as a result of the implementation of the plan shall require an Erosion Control Plan to be					

submitted to the City of Fremont in conjunction with a Grading Permit Application. The Plan shall include winterization, dust, erosion and pollution control measures conforming to the California Stormwater Quality Association (CASQA) Best Management Practices handbooks, with sediment basin design calculations. The Erosion Control Plan shall describe the "best management practices" (BMPs) to be used during and after construction to control pollution resulting from both storm water and construction water runoff. The Plan shall include locations of vehicle and equipment staging, portable restrooms, mobilization areas, and planned access routes.

Recommended soil stabilization techniques include placement of plastic-free straw wattles, silt fences, berms, and gravel construction entrance areas or other control to prevent tracking sediment off-site onto city streets and into storm drains, as well as hydroseeding or planting of all disturbed areas.

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
Mitigation Measure GEO-4: Unstable Geologic Units and Expansive Soils: Proper foundation engineering and construction of any structures built as a result of implementation of the Project shall be performed in accordance with the recommendations of a Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design. Geotechnical recommendations shall address zones of potentially liquefiable or expansive soil as they relate to proposed improvements and provide foundation, road pavement section, concrete slab-on-grade, utility construction and other recommendations to mitigate any zones encountered.	Preparation of foundation design recommendations, including measures for liquefaction potential and expansive soil	Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design	As part of final design, review prior to issuance of final grading and building permits	EBRPD Construction Manager	Twice, on building permit issuance and sign-off
The structural engineering design shall incorporate seismic parameters as outlined in the current California Building Code. The Geotechnical recommendations shall establish the seismic design parameters, as determined by the geotechnical engineer in accordance with requirements of the current California Building Code. GREENHOUSE GAS EMISSIONS					
The project would not result in significant impacts related to greenhouse gas emissions; therefore, no mitigation measures are required.					
HAZARDS AND HAZARDOUS MATERIALS					
<u>Mitigation Measure HAZ-1: Soil Testing and LANL Benchmarks:</u> The Park District shall conduct sampling and testing of surface and near- surface soils in the areas of the Western Wetlands Natural Unit that are proposed for wetland restoration. The sampling and testing program shall include concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene. The test results shall be compared to the ecological screening benchmarks for soil and sediment (ECORISK Database) developed by Los Alamos National Laboratory (LANL). If no samples exceed the respective LANL benchmarks, no further mitigation is required.	Soil sampling and testing	Sampling by Qualified Engineer or Geologist, , testing by Qualified Testing Laboratory	Prior to construction	EBRPD Construction Manager	Prior to construction

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
Mitigation Measure HAZ-2: Ecological Risk Assessment: Using the results of testing for organochlorine pesticides from Mitigation Measure HAZ-1, the Park District shall conduct a focused ecological risk assessment to evaluate the effects of known concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxyclor, and toxaphene, relative to likely ecological receptors at the site, particularly insectivorous birds and mammals. If the predictive ecological assessment identifies significant risk, Mitigation Measures HAZ-3, HAZ-4, and HAZ-5 shall be implemented. If the predictive ecological assessment does not identify significant risk, no further mitigation is required.	Ecological risk assessment	Qualified ecological risk consultant	Prior to construction	EBRPD Construction Manager	Prior to construction
Mitigation Measure HAZ-3: Site Specific Health and Safety Plan: If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, a Site-Specific Health and Safety Plan for construction workers shall be prepared by the Park District and approved by an industrial hygienist prior to the start of any earthmoving activities	Preparation of Site Specific Health and Safety Plan	Park District, approved industrial hygienist	Prior to earthmoving activities	EBRPD Construction Manager	Prior to and during earthmoving activities
associated with the alternative remediation strategies. The site-specific Health and Safety Plan shall be implemented by the Construction Contractors during remediation work. The Site-Specific Health and Safety Plan shall be prepared in accordance with the California Division of Occupational Safety and Health (CAL/OSHA) Standards identified as part of Title 8 of the California Code of Regulations.	Implementation of Site Specific Health and Safety Plan	Construction Contractor	During earthmoving activities	EBRPD Construction Manager	During earthmoving activities
Mitigation Measure HAZ-4: Site Specific Air Quality Monitoring Plan: If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, an Air Quality Monitoring Plan shall be prepared by the Park District and approved by the California Department of Toxic Substances Control (DTSC) and/or other regulatory oversight agency or agencies reviewing the remediation of the Project area, prior to the	Preparation of Site Specific Air Quality Monitoring Plan	Approved industrial hygienist, DTSC and/or other regulatory agencies reviewing the remediation	Prior to earthmoving activities associated with remediation	EBRPD Construction Manager	Prior to earthmoving activities associated with remediation
start of any earthmoving activities associated with remediation strategies. The Air Quality Monitoring Plan shall be implemented by the Construction Contractors during remediation work in order to prevent toxic dust in the air from reaching levels that are hazardous to the workers and/or surrounding residents. The Air Quality Monitoring Plan shall be prepared in accordance with the CAL/OSHA Standards	Implementation of Site Specific Air Quality Monitoring Plan	Construction Contractor	During earthmoving activities associated with remediation	EBRPD Construction Manager	During earthmoving activities associated with remediation

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
identified as part of Title 8 of the California Code of Regulations.					
<u>Mitigation Measure HAZ-5: Soil Remediation:</u> Contaminated soil shall be excavated and disposed offsite at a permitted Class II or Class III disposal facility, if required. Alternatively, soils with very low levels of contamination that do not pose a human health risk could be used beneficially as fill below paved parking areas or areas that receive aggregate base as a capping. Remediation shall include confirmation samples from excavations within remedial areas to limit the volume removed and verify that identified contaminated soil has been removed from the site. Adequate dust mitigation measures during excavation shall be implemented, and may include, but are not limited to, application of water and dust suppressants helps to control airborne particles, restrictions and/or limits to soil movement procedures, use of personal protective equipment (PPE), respirators, and decontamination procedures to reduce potential exposure to and spreading of contaminants. Truck cleaning shall include dry brushing after loading and using wheel grates to knock off excess dirt upon exiting the site. Soil loads in trucks shall be wetted slightly, leveled, and covered to minimize soil falling onto roadways. Transportation routes, times of work, and dust controls shall be chosen to reduce impacts to residential and other sensitive areas during removal and transport over public right-of-way (ROW). Remediation shall be conducted in coordination with, and approval of, the California Department of Toxic Substances	Soil remediation using specified procedures, confirmation samples	Construction Contractor in coordination with DTSC and/or RWQCB	As needed during construction	EBRPD Construction Manager	During soil remediation activities
Control (DTSC) and the San Francisco Bay Regional Water Quality					
Control Board (RWQCB), should testing indicate soil contamination at levels requiring remedial action.					
<u>Mitigation Measure HAZ-6: Asbestos and Lead-Based Paint:</u> For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potentially friable asbestos-containing building materials (ACBMs) in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition that may disturb the materials, by a contractor registered with Cal/OSHA as an asbestos abatement contractor. The contractor performing abatement shall hold the C-22 asbestos abatement license or a B-class general	Removal of asbestos and lead-based paint from structures that are demolished or disassembled	Registered asbestos abatement contractor, personnel with lead training meeting the requirements of Cal/OSHA, 8 CCR 1532.1	During demolition or disassembly of project structures	EBRPD Construction Manager	During demolition or disassembly of project structures

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
license with asbestos certification. Because asbestos-containing materials on the project site are likely to become friable during demolition, all such materials must be abated prior to demolition. All demolition and disassembly activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. All friable asbestos materials, and any non-friable materials that may become friable during abatement, shall be disposed of as hazardous (regulated) asbestos-containing material. Non-friable materials that are not made friable may be disposed of as non-hazardous asbestos-containing material. A 10-day notice of planned asbestos					
removal and disposal shall be given to the Bay Area Air Quality Management District (BAAQMD), along with a notification of demolition of structure(s). The local office of the State Occupational Safety and Health Administration (OSHA) shall be notified at least 24 hours prior to abatement activities.					
For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potential lead-based paint. Personnel must have lead training sufficient to meet the requirements of Cal/OSHA, 8 CCR 1532.1. The workers shall use lead-safe work practices when handling paints with any detectable amount of lead. A containment area shall be used to prevent the buildup of lead dust on remaining surfaces, in compliance with California Department of Public Health requirements. All waste streams created as part of the project shall be profiled or characterized prior to disposal, and packaged as applicable, in compliance with the requirements of the California Department of Toxic Substances Control and Title 22.					
HYDROLOGY AND WATER QUALITY		0 10		EDDDD	
<u>Mitigation Measure HYDRO-1: Erosion and Sediment Control:</u> The Park District shall prepare a Soil Erosion Control and Revegetation Plan that addresses temporary construction-related temporary erosion control and provides permanent erosion control through revegetation	Preparation of Soil Erosion Control and Revegetation Plan	Qualified Stormwater Developer, Project Engineer	Prior to issuance of grading permits	EBRPD Construction Manager	Prior to construction

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
and other means. The Plan, which can be a part of the project SWPPP see (HYDRO-2) shall be incorporated into the Project's Construction Documents. The Construction Plans shall specify erosion and sediment control measures, including Best Management Practices (BMPs) to	Implement Soil Erosion Control and Revegetation Plan	Construction Contractor	During construction	EBRPD Construction Manager	During construction
control short-term construction-related water quality impacts. BMPs shall include at a minimum the following measures (where applicable):	Cover and re-seed disturbed areas	Construction Contractor	Within one month of ground	EBRPD Construction	Within one month of ground
• Limiting access routes and stabilizing access points. Surface disturbance of soil and vegetation shall be minimized; existing access and maintenance roads shall be used wherever feasible.			disturbance in each project component constructed	Manager	disturbance in each project component constructed
• Stabilizing graded areas as soon as possible following completion of disturbance with seeding, mulching, and installation of erosion control materials such erosion control blankets and straw rolls, or other approved and effective methods. Only native seed and plant materials shall be used, unless otherwise approved by the Qualified Biologist.					
• Delineating clearing limits, easements, setbacks, environmentally sensitive areas, and drainage courses by marking them in the field, and installing exclusion fencing, silt fencing, and/or coir logs or straw rolls.					
• Stabilizing and preventing sediment from entering temporary conveyance channels and stormdrain outlets.					
• If rainfall is expected to occur, using temporary sediment control measures, such as additional silt fencing, straw rolls, covering stock piles and directing runoff to sediment detention structures to filter and remove sediment.					
• Use temporary measures, such as flow diversion, temporary ditches, and silt fencing or straw wattles.					
• Any stockpiled soil shall be placed, sloped, and covered so that it would not be subject to accelerated erosion.					
• Accidental discharge of all Project related materials and fluids into local waterways shall be avoided by using straw rolls or silt fences, constructing berms or barriers around construction					

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
materials, or installing geofabric in disturbed areas with long, steep slopes.					
After ground-disturbing activities are complete for each Project component constructed, all graded or disturbed areas shall be covered with protective material such as mulch, and re-seeded with native plant species. The Erosion Control and Revegetation Plan SWPPP shall include details regarding site preparation, top soiling or composting, seeding, fertilizer, mulching, and temporary irrigation.					
Mitigation Measure HYDRO-2: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) and a Spill Control and Countermeasures Plan (SCCP) shall be prepared and implemented by the Park District's Construction Contractor following SWRCB	Prepare SWPPP and SCCP	Qualified Stormwater Developer	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to issuance of grading permit
standards for erosion control and stormwater management. Specific measures, as cited below, shall be adapted from the most current edition of the Stormwater Best Management Practice Handbook for Construction, published by the California Stormwater Quality Association (CASQA). The SWPPP shall include Best Management Practices (BMPs) to prevent or minimize stormwater pollution during construction activities, as well as addressing post construction stormwater management and permanent erosion control. The Project Erosion Control and Revegetation Plan, and Spill Control and Countermeasures Plan, shall be included as part of the SWPPP. Plan preparation and implementation shall be included in the Project's Construction Documents.	Implement SWPPP and SCCP	Construction Contractor	During construction	EBRPD Construction Manager	During construction
Mitigation Measure HYDRO-3: Equipment Maintenance: All refueling and/or maintenance of heavy equipment shall take place at a minimum of 50 feet away from the top of bank of creeks and all identified jurisdictional wetlands and Waters of the US drainage courses. The refueling/maintenance and construction staging area shall be bermed,	Prepare refueling/maintenance and construction staging area	Construction Contractor	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to construction
graveled, or covered with straw and incorporate measures for capture of any accidental spills. All temporary construction lay-down and staging areas shall be restored upon completion of work with silt fences, straw rolls, and ground bags, etc. removed.	Refueling and maintenance within designated area	Construction Contractor	During construction	EBRPD Construction Manager	During construction
	Restoration of refueling/maintenance and construction staging	Construction Contractor	Prior to completion of construction	EBRPD Construction Manager	At completion of construction activities

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
	area		activities		
 <u>Mitigation Measure HYDRO-4: Well:</u> The Park District shall coordinate and consult with the Alameda County Water District and obtain a permit or approval prior to implementing the following: Deconstruction and closure of abandoned wells and related irrigation and drainage infrastructure. 	Obtain permit or approval for deconstruction of abandoned well and irrigation infrastructure, and drilling	EBRPD Construction Manager	Prior to deconstruction of abandoned well and irrigation infrastructure, and drilling	EBRPD Construction Manager	Prior to deconstruction of abandoned well and irrigation infrastructure, and drilling
 Drilling for piers or wells that may penetrate groundwater aquifers. Provide continued access to existing monitoring wells and continue to cooperate with ACWD in monitoring activities. 	Provide access to and cooperate with ACWD monitoring	EBRPD Construction Manager	Ongoing	EBRPD Construction Manager	Ongoing
Mitigation Measure HYDRO-5: Unused Septic Tank and Leachfield Systems: The Park District shall obtain a permit or approval from Alameda County Environmental Health for the closure and abandonment of obsolete and unused septic tank and leachfield systems.	Obtain permit or approval for closure and abandonment of septic and leachfield systems	EBRPD Construction Manager	Prior to closure and abandonment of septic and leachfield systems	EBRPD Construction Manager	Prior to closure and abandonment of septic and leachfield systems
<u>Mitigation Measure HYDRO-6: Stormwater Management:</u> The Park District shall prepare and implement a post construction stormwater management plan in compliance with the City of Fremont's joint municipal stormwater permit and development permit program.	Prepare post construction stormwater management plan	Qualified Stormwater Developer, City of Fremont	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to issuance of grading permit
	Implement post construction stormwater management plan	EBRPD Park Manager	Prior to completion of construction	EBRPD Stewardship Manager	As specified in post construction stormwater management plan
Mitigation Measure HYDRO-7: Bridge Design: The Park District shall prepare and submit final bridge plans for all new vehicular and pedestrian bridges that cross waterways under jurisdiction by the City of Fremont or Alameda County. The bridge plans are subject to review and approval by the City of Fremont Engineering Department and Alameda County Flood Control and Water Conservation District. The bridge plans shall include structural engineering, geotechnical engineering, and hydraulic engineering information. The responsible designer shall be a State of California licensed Civil Engineer and shall be experienced in hydraulic analysis, bridge design, and flood channel	Prepare and submit final bridge plans for all new bridges	State of California licensed Civil Engineer experienced in hydraulic analysis, bridge design, and flood channel and bank protection design	Prior to issuance of grading permit	City of Fremont Engineering Department and Alameda County Flood Control and Water Conservation District	Prior to issuance of grading permit

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
and bank protection design. The Engineering Plans shall demonstrate conformity to City of Fremont, Alameda County, and FEMA floodplain management regulations and include design elevations of the bridge/boardwalk, conformity with 100-year flood elevation freeboard					
requirements, the locations and structural design of the bridge abutments with respect to flood flows, bridge loading, and channel bank					
protection requirements. LAND USE AND PLANNING					
The project would not result in significant project or cumulative impacts related to land use and planning; therefore, no mitigation measures are required.					
MINERAL RESOURCES The project would not result in significant project or cumulative impacts related to mineral resources; therefore, no mitigation measures are required.					
NOISE					
<u>Mitigation Measure NOI-1:</u> To mitigate temporary noise impacts, the following BMPs shall be incorporated into the construction documents to be implemented by the Project Contractor:	Implement BMPs for construction noise	Construction Contractor	During construction	EBRPD Construction Manager	During construction
• Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.					
• Use quietest type of construction equipment whenever possible, particularly air compressors.					
• Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.					
• Prohibit unnecessary idling of internal combustion engines.					
• Designate a noise (and vibration) disturbance coordinator at the Park District who shall be responsible for responding to complaints about noise (and vibration) during construction. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and determine and implement reasonable measures warranted to correct the problem.					
Limit noise generating activities to the weekday hours of seven					

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
a.m. to seven p.m. and the Saturday or holiday hours of nine a.m. to six p.m., with Sunday noise not allowed per City noise ordinance.					
POPULATION AND HOUSING					
The project would not result in significant project or cumulative impacts related to population and housing; therefore, no mitigation measures are required.					
PUBLIC SERVICES The project would not result in significant project or cumulative impacts related to public services; therefore, no mitigation measures are required. RECREATION					
The project would not result in significant project or cumulative impacts related to recreation; therefore, no mitigation measures are required. TRANSPORTATION AND TRAFFIC					
<u>Mitigation Measure TRANSP-1:</u> To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City of Fremont should institute "Right Turn Only" from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping, and raised curbs may be needed to reinforce the right-turn only requirement. The Park District shall contribute its fair share (one percent) toward the cost of the improvements.	Contribute Project fair share (one percent) of cost of "Right Turn Only" from the Patterson Ranch Road and Commerce Drive approaches	EBRPD	As determined by City of Fremont	EBRPD Construction Manager or Park Manager	As determined by City of Fremont
 <u>Mitigation Measure TRANSP-2:</u> The Proposed Project shall contribute a fair share (one percent) of the cost of future intersection modifications to improve pedestrian and bicycle access across Paseo Padre Parkway, at or before the time the City of Fremont implements intersection modifications. These intersection improvements may consist of: Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet. Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles. Shorten the northbound right turn weaving area to slow 	Contribute Project fair share (one percent) of cost of intersection modifications for pedestrian and bicycle access across Paseo Padre Parkway	EBRPD	As determined by City of Fremont	EBRPD Construction Manager or Park Manager	As determined by City of Fremont

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone.Install additional warning signs in advance and at the bicycle-					
vehicle weaving area and the pedestrian crosswalks.					
• Upgrade the crosswalks from transverse markings (two white					
lines) to continental markings.					
 Add yield lines 30 feet in advance of the crosswalks. 					
 Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway. 					
• The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future.					
Mitigation Measure TRANSP-3: Implement Mitigation Measure	See Mitigation Measure	See Mitigation Measure	See Mitigation	See Mitigation	See Mitigation
TRANSP-1.	TRANSP-1	TRANSP-1	Measure	Measure	Measure
			TRANSP-1	TRANSP-1	TRANSP-1
Mitigation Measure TRANSP-4: Implement Mitigation Measure	See Mitigation Measure	See Mitigation Measure	See Mitigation	See Mitigation	See Mitigation
TRANSP-2.	TRANSP-2	TRANSP-2	Measure TRANSP-2	Measure TRANSP-2	Measure TRANSP-2
Mitigation Measure TRANSP-5: Implement Mitigation Measure	See Mitigation Measure	See Mitigation Measure	See Mitigation	See Mitigation	See Mitigation
TRANSP-2.	TRANSP-2	TRANSP-2	Measure	Measure	Measure
			TRANSP-2	TRANSP-2	TRANSP-2
TRIBAL CULTURAL RESOURCES					
See Cultural and Tribal Cultural Resources, above.					
UTILITIES AND SERVICE SYSTEMS					
Mitigation Measure UTIL-1: Construction and Demolition Debris:	Solid waste recovery	EBRPD Construction	Prior to beginning	EBRPD	Prior to
Prior to completion of the plans and specifications, the Park District	plan	Manager	of construction	Stewardship	beginning of
shall review the plans to ensure that they include a solid waste recovery				Manager	construction
plan. This recovery plan shall be in compliance with the Park District's					
adopted sustainability policy, which is directed at minimizing disposal of solid waste generated during construction in accordance with applicable					
state and county codes. The recovery plan shall address, at a minimum,					
recycling of asphalt and concrete paving materials, lumber and metal					
and concrete pipes and tanks, and balancing graded soil on site to the					
maximum extent feasible.					

FILED ALAMEDA COUNTY

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	LK, County Clerk Appendix D
To: Office of Planning and Research U.S. Mail: Street Address: P.O. Box 3044 1400 Tenth St., Rm 113	From: Public Agency: <u>East Bay Regional Park</u> Distric Address: <u>2950 Peralta Daks Ct</u> Oakland, <u>CA</u> 94605
Sacramento, CA 95812-3044 Sacramento, CA 95814	Contact: Karla Cuero Phone: 570 - 544 - 2622
County Clerk County of: <u>Alameda</u> Address: <u>1106 Madison Street</u>	Lead Agency (if different from above):
Dakland, CA 941007	Address:
	Phone:
Resources Code. State Clearinghouse Number (if submitted to State Clearinghouse Number (if submitted to State Clearing)	and an internal state of a local data in the second state of the s
Project Title: <u>Coyote Hills Restoration</u>	
Project Applicant: East Bay Regional Par	
Project Location (include county): Fremont Al	ameda county
Project Description: Project consists of two main actions in the 2010-0000 Parts in the 2010-0000 Parts in the 2010-00000 Parts in the 2010-000000 Parts in the 2010-000000 Parts in the 2010-000000 Parts in the 2010-000000 Parts in the 2010-0000000 Parts in the 2010-0000000 Parts in the 2010-00000000000 Parts in the 2010-0000000000000000000000000000000000	ons: 1) approve a Land Use Plan
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Authority cited: Sections 21083, Public Resources Code. Reference Section 21000-21174, Public Resources Code.

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STATE CLEARINGHOUSE

***ENVIRONMENTAL DECLARATION**

(CALIFORNIA FISH AND GAME CODE SECTION 711.4)

LEAD AGENCY NAME AND ADDRESS

FOR COUNTY CLERK USE ONLY

East Bay Regional Park District 2950 Peralta Daks Court Oakland, CA 94605

ENDORSED FILED ALAMEDA COUNTY

SEP 0 4 2019

MELISSA WILK, County Clerk FILE NO Deputy

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT: (PLEASE MARK ONLY ONE CLASSIFICATION)

1. NOTICE OF EXEMPTION / STATEMENT OF EXEMPTION

- [] A STATUTORILY OR CATEGORICALLY EXEMPT
 - \$ 50.00 COUNTY CLERK HANDLING FEE

2. NOTICE OF DETERMINATION (NOD)

- [] A NEGATIVE DECLARATION (OR MITIGATED NEG. DEC.)
 - \$ 2,354.75 STATE FILING FEE
 - \$ 50.00 COUNTY CLERK HANDLING FEE
- B ENVIRONMENTAL IMPACT REPORT (EIR)
 - \$ 3,271.00 STATE FILING FEE
 - \$ 50.00 COUNTY CLERK HANDLING FEE
- 3. OTHER:

A COPY OF THIS FORM MUST BE COMPLETED AND SUBMITTED WITH EACH COPY OF AN ENVIRONMENTAL DECLARATION BEING FILED WITH THE ALAMEDA COUNTY CLERK.

BY MAIL FILINGS:

PLEASE INCLUDE FIVE (5) COPIES OF ALL NECESSARY DOCUMENTS AND TWO (2) SELF-ADDRESSED ENVELOPES.

IN PERSON FILINGS:

PLEASE INCLUDE FIVE (5) COPIES OF ALL NECESSARY DOCUMENTS AND ONE (1) SELF-ADDRESSED ENVELOPES.

ALL APPLICABLE FEES MUST BE PAID AT THE TIME OF FILING.

FEES ARE EFFECTIVE JANUARY 1, 2019

MAKE CHECKS PAYABLE TO: ALAMEDA COUNTY CLERK

Notice of Determination	Appendix D		
To:	From:		
Office of Planning and Research	Public Agency: <u>East Bay Regional Park</u> District		
U.S. Mail: Street Address:	Address: <u>2950 Peralta Daks (t</u>		
P.O. Box 3044 1400 Tenth St., Rm 113	<u>Oakland</u> , <u>CA 94605</u>		
Sacramento, CA 95812-3044 Sacramento, CA 95814	Contact: <u>Karla Cuero</u>		
County Clerk	Phone: <u>510-544-2622</u>		
County Clerk	Lead Agency (if different from above):		
County of: Alameda	Address:		
Address: IIOlo Madison Street	Contact:		
Ockland, CA 941007	Phone:		

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2018062002	
Project Title: Coyote Hills Restoration and Public Access Project	
Project Applicant: East Bay Regional Park District	
Project Location (include county): Fremont, Alameda county	
Project Description:	

Project consists of two main actions: 1) approve a Land Use Plan Amendment to include the 306-acre Park Expansion Area to Capote Hills Regional Park; 2) implement habitat restoration and public access improvements.

This is to advise that the	East	Bay	Regional	park	District	has approved the above
		lead A	gency or 🔲 Re	sponsible	e Agency)	••
described project on0	9/03/10 (date)	<u>]</u> ar	id has, made th	e followin	ng determinatio	ons regarding the above

described project.

1. The project [will will not] have a significant effect on the environment.

2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures [were not] made a condition of the approval of the project.

4. A mitigation reporting or monitoring plan [was in was not] adopted for this project.

5. A statement of Overriding Considerations [was not] adopted for this project.

6. Findings [were I were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

East Bay Regional Park District	Offices: 2950 Peralta Daks Ct. O	akland, CA
Signature (Public Agency): KallaQuen	Title: Project Coordinator	94605
9/4/2019	me:	

Date: _____

Date Received for filing at OPR Governor's Office of Planning & Research

SEP 06 2019

STATE CLEARINGHOUSE

Authority cited: Sections 21083, Public Resources Code. Reference Section 21000-21174, Public Resources Code.



2950 PERALTA OAKS COURT • OAKLAND • CALIFORNIA • 94605-0381 • T: 1-888-EBPARKS • F: 510-569-4319 • TRS RELAY: 711 • EBPARKS.ORG

ADDENDUM TO COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT 2019 FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)

ALTERNATE PATTERSON SLOUGH LOOKOUT SPUR TRAIL ALIGNMENT



May 2022

Board of Directors

BACKGROUND:

This document is an Addendum to the Final Environmental Impact Report (FEIR) for the Coyote Hills Restoration and Public Access Project (SCH # 2018062002) adopted on March 7, 2019. The Coyote Hills Restoration and Public Access Project (Project) aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The existing Coyote Hills Regional Park is in the northwest corner of the City of Fremont. The 306-acre Expansion area borders the east side of the existing Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the to the north by the Alameda Creek Flood Control Channel. The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and visitor-serving facilities and public access trail development proposed for the Expansion area.

Under the LUPA, a trail system is proposed that could include two spur trails to wildlife observation platforms along the east and west sides of Patterson Slough within the Patterson Slough Natural Unit. The proposed original alignment of the Patterson Slough Lookout (West-side) Spur Trail and Wildlife Observation Platform is located along an existing dirt road to farm labor housing that formerly existed on the Project site. Only foot traffic would be allowed on this trail alignment, and the planned wildlife viewing platform would be set back a minimum of 100 feet from the edge of the riparian corridor, and also would be protected with fencing. This proposed setback is greater than the City of Fremont's requirement of a 30-foot development setback from stream courses. Construction of public access and visitor-serving facilities would be designed to minimize excavation to the first several inches associated with clearing and grubbing activities. Most facilities, such as the parking lot, restrooms, and multi-use trails would involve fill importation and placement in non-wetland areas, no excavation, and include appropriate setback from sensitive habitat areas.

DESCRIPTION OF MINOR TECHNICAL PROJECT CHANGE:

The Park District is proposing the following minor technical changes in the proposed project trail plan that was analyzed in the previously adopted 2019 FEIR:

Alternate Alignment for Patterson Slough Lookout (West) Spur Trail. To increase protection of sensitive biological resources, staff has proposed the Patterson Slough Lookout (West) Spur Trail be located approximately 90 feet away from the existing access road rather than the original 50-foot separation from the existing access road. The trail will be constructed on fill using conventional construction equipment typically used for narrow roadways and trails. This provides a greater setback from Sensitive Protection Features, including Patterson Slough and is consistent with local, regional and federal goals to provide the public with opportunities to view and enjoy open space while avoiding existing sensitive wildlife habitat. The areas of disturbance and levels of impact are also unchanged. The proposed alternative alignment is shown in Attachment I.

CEQA PROCESS:

Section 15162 of the CEQA Guidelines requires a Subsequent EIR when an MND has already been adopted or an EIR has been certified and one or more of the following circumstances exist:

- 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2. Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Likewise, California Public Resources Code (PRC) Section 21166 states that unless one or more of the following events occur, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency:

- Substantial changes are proposed in the project which will require major revisions of the environmental impact report;
- Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; or
- New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

This Addendum evaluates the Proposed Project as a revision of the 20109 FEIR for the Project and demonstrates that these modifications does not trigger any of the conditions described above. Based on the analysis provided below and in the attached resource memorandums, an Addendum to the 2019 FEIR is the appropriate CEQA document.

ANALYSIS OF PROPOSED ENVIROMENTAL EFFECT:

The previously adopted 2019 FEIR analyzed the potentially significant environmental impacts associated with implementation of the Project. The FEIR identified some environmental impacts that could be reduced to a less-than-significant level with the implementation of mitigation measures, which were adopted as part of the FEIR mitigation monitoring plan. Appropriate mitigation measures were adopted as part of the FEIR to ensure environmental impacts from new development would be less-than-significant. The inclusion of the proposed new alignment of the Patterson Slough West Lookout Trail will result in environmental impacts similar to those analyzed in the previously adopted 2019 FEIR and will not require additional mitigation measures to address new environmental impacts. As mentioned above, all biological impacts of the Proposed Project, including the Patterson Slough Lookout (West-side) Spur Trail, would be reduced to a less-than-significant level by mitigation

measures identified in the EIR. The same mitigation measures applied to this alternative would similarly reduce any potential environmental impacts to those identified in the 2019 FEIR.

CONCLUSION:

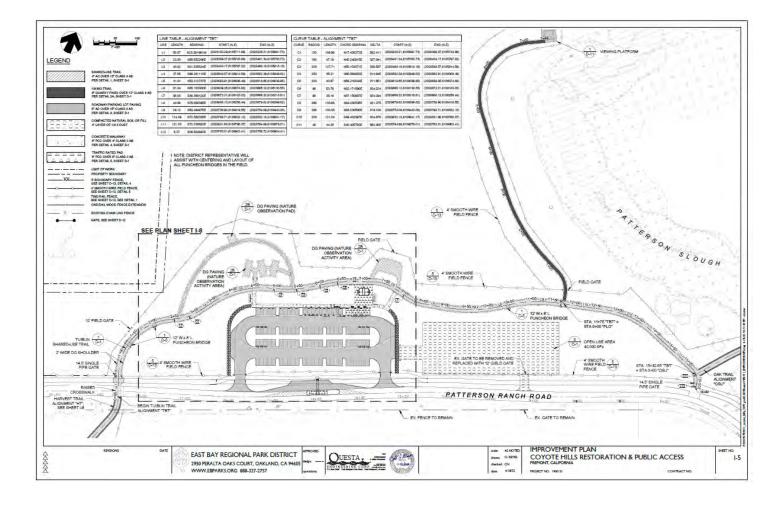
As verified in this Addendum, the analyses and conclusions in the 2019 FEIR remain current and valid. The proposed modifications would not cause new significant effects not identified in the FEIR nor increase the level of environmental effect to substantial or significant, and, hence, no new mitigation measures would be necessary to reduce significant effects. No change has occurred with respect to circumstances surrounding the Project that would cause new or substantially more severe significant environmental effects than were identified in the 2019 FEIR. In addition, no new information has become available that shows that the project would cause new or substantially more severe significant environmental effects which have not already been analyzed in the 2019 FEIR. Therefore, no further environmental review is required beyond this Addendum.

Additionally, there are no new significant effects not identified in the FEIR as it relates to Biological Resources or Tribal/Cultural Resources. This is discussed in additional detail in Attachment II (Biological Resources Memorandum) and Attachment III (Tribal Cultural Resources Memorandum).

ATTACHMENTS:

- 1) Proposed Alternative Alignment
- 2) Biological Resources Memorandum
- 3) Tribal Cultural Resources Memorandum

1) Proposed Alternative Alignment



BIOLOGICAL RESOURCES MEMORANDUM

DATE:	May 16, 2022
TO:	Chris Barton, Restoration Projects Manager
FROM:	David "Doc Quack" Riensche – East Bay Regional Park District Wildlife Biologist
SUBJECT: Project	Cultural and Tribal Resources Addendum for the Coyote Hills Restoration and Public Access
PAGES:	2

The proposed Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park (Park). The Coyote Hills Restoration and Public Access Project consists of two main actions: 1) approve a Land Use Plan for the 306-acre Park Expansion Area and add the Land Use Unit designations to the 2005 Coyote Hills Regional Park Land Use Plan (LUP) as an Amendment, 2) construct the elements of a Park Development Plan. The Park, located in Fremont California, contains one of the largest willow-dominated riparian woodlands, 8.5 hectares, remaining along the eastern shore of San Francisco Bay (Riensche et al. 2010). Riparian habitat, within California provides important breeding and over winter grounds, migratory stopover areas and corridors for dispersal (Cogswell 1962, Gaines 1977, Ralph 1998, Humple and Geupel 2002, Flannery et al. 2004). During systematic riparian breeding bird survey efforts at this location from 1994 through 2018, 80 bird species were observed (10 are special status species) of which 25 are known to nest successfully (Riensche and Kitting 2022).

To reduce recreational use and trail size impacts on the riparian breed bird population (see Purdy et al. 1987, Miller et al. 1998) in the Patterson Slough willows, staff recommends an alternate alignment for the Patterson Slough Spur Lookout (West)Trail and is preparing an Addendum to the original 2019 Final Environmental Impact Report for the Coyote Hills Restoration and Public Access Project. This new alignment moves the Patterson Slough Spur Lookout (West) Trail 30 meters (90 feet) west of the previously proposed trail location covered in the LUPA. There will be no new adverse wildlife impacts or substantial biological changes to the previously analyzed, original EIR. Due to this further set back of the trail, anthropogenic effects to biological resources along the Patterson Slough Willows will be reduced. In summary, this staff recommendation for the alternate alignment of the trail will avoid and reduce impacts to a less-than-significant level for the following special status species: White-tailed kite (*Elanus Leucurus*), Long-eared owl (*Asio otus*), Yellow warbler (*Dendroica petechia brewstri*), and Yellow-breasted Chat (*Icteria virens*).

<u>Reference</u>

- Cogswell, H. L. 1962. Operation recovery begun in California's Central Valley. Western Bird Bander 37:52-54.
- Flannery, M. E., S. L. Guers, T. Gardali, N. Nur and G. R. Guepel. 2004. Landbird migration at the Salton Sea: the importance of desert riparian habitat. Studies in Avian Biology: 27: 106-115.
- Gaines, D. 1977. The valley riparian forest of California: their importance to bird populations. In A. Sands, editor, Riparian Forests in California: their ecology and conservation. Institute of Ecology Publication 15. University of California, Davis CA.
- Humple, D. L. and G. R. Geupel. 2002. Autumn populations of birds in riparian habitats of California's central valley. Western Birds 33: 34-50.
- Miller, S.G., Knight, R.L. and Miller, C. K. 1998. Influence of Recreational Trails on Breeding Bird Communities. Ecological Applications 8(1): 162-169
- Purdy, K. G., Goff, G. R., Decker, D. J., Pomerantz, G. A., and N. A. Connelly. 1987. A guide to managing human activity on National Wildlife Refuges. Human Dimension Research Unit, Department of Natural Resources, Cornell University, Ithaca, New York, USA.
- Ralph, C. J. 1998. A Comparison of timing, content, and monitoring methods of landbird migration in the Pacific States. Paper presented at the North American Ornithological conference, April 1998. St Louis, MO.
- Riensche, D., and C. Kitting. 2022. Decades of Riparian Breeding Birds Show Persistent Reduction After Extreme Heat. Western Birds (in press)
- Riensche, D., M. Morrow, M. Clark, and C. Kitting. 2010. Monitoring trends in a breeding bird assemblage with implications for riparian conservation.
 Transactions of the Western Section of the Wildlife Society 46: 7-20

3) Cultural Resources Memorandum

MEMORANDUM

DATE:	May 18, 2022
TO:	Chris Barton, Restoration Projects Manager
FROM:	Annamarie Guerrero, M.A., RPA, - Park District Cultural Services Coordinator
SUBJECT:	Cultural and Tribal Resources Addendum for the Coyote Hills Restoration and Public Access Project
PAGES:	7

This memorandum documents the results of a cultural resources study for the re-location of the Patterson Slough Lookout Trail conducted to assist the East Bay Regional Park District (Park District) in meeting cultural resources compliance requirements of the California Environmental Quality Act (CEQA) by identifying potential significant impacts that could occur as a result of the implementation of this minor change.

This minor trail re-alignment would not result in any changes to the Environmental Impact Report's (EIR) findings, that potential impacts to cultural resources would be less than significant with the implementation of the mitigation measures identified in the EIR. The mitigation measures identified in the EIR remain current and valid as a result of this study for the trail re-alignment. The applicable cultural resources mitigation measures to be implemented as a result of this study are provided in the Results and Recommendations section below.

The Coyote Hills Restoration and Public Access Project (Project) would restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park, which is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge. The Project would include a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements park signage, wildlife observation platforms, approximately 130 acres of habitat restoration and enhancement, and over four miles of new hiking trails (Park District 2019).

The Project EIR assessed the conversion of an existing dirt maintenance access road into the Patterson Slough Lookout Trail that would provide access to a wildlife observation platform (Park District 2019). Following certification of the EIR in 2019, the Project was modified to increase the buffer distance between the Patterson Slough Lookout Trail (see Figure 1) and adjacent riparian vegetation along Patterson Slough. The re-aligned trail would be constructed 90 feet west of the center line of the existing dirt maintenance access road to avoid impacts to a riparian corridor but would still be constructed using the same methods and would retain the same dimensions (i.e., length and width) as the trail alignment proposed in the EIR.

The trail will be 600-feet-long by 9-to-10 feet wide and constructed with 1-to-1.5 feet of fill with minimal ground disturbance. The trail will lead to a wildlife observation platform, constructed of wood or composite materials and will be

15 to 25 feet in length and width. It will be elevated five to eight feet above adjacent grade on surface-placed concrete pier

blocks or pin piers to minimize soil disturbance and potential impacts to subsurface cultural resources. The trail and wildlife observation platform will be bordered by a 4-foot-tall smooth wire field fence to separate the trail from restoration and enhancement areas. The maximum vertical extent of the fence would be 36 inches below ground surface. Prior to the release of the Project EIR, the Park District completed consultation pursuant to Assembly Bill (AB) 52 (Gatto, Chapter 532 Statutes 2014) for this Project. No further consultation pursuant to AB52 is required, given that such consultation applies only to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

The following memorandum addresses the re-location of the Patterson Slough Lookout Trail, a minor change in the Project, to ensure that effects to cultural and tribal resources as a result of the Project are adequately addressed.

Previous Studies

Basin Research Associates (Basin Research Associates [Basin] 2018) completed a historic property survey report in support of the Park District's EIR for the Project. The report identified that 17 previous studies have included, and/or are adjacent to, the EIR Project area (see Basin 2018 for the complete list of studies).

Basin (2018) identified that four resources (two built environment and two Native American archaeological resources) have been previously identified within the EIR Project area. The built environment resources include the Arden Dairy Milk House and the Patterson Ranch Contractor's Residence. The Native American archaeological resources include P-01-000034 and disturbed midden located near the Oak Tree Produce Complex (National Register of Historic Places [NRHP]/California Register of Historical Resources [CRHR]; see Figure 2). P-01-000034 is eligible for the NRHP/CRHR, is adjacent to the EIR Project site. The midden near the Oak Tree Produce Complex has been included in three previous studies (Garaventa et al. 1991, Ambro 1992, and Busby 2007). The midden was determined to be comprised of fill containing redeposited shell midden. Basin (2018) indicated that the resource does not appear to be eligible to the CRHR.

As a result of Basin's (2018) study, two previously unrecorded midden locations were identified. Although an archaeological field survey was not conducted as a part of Basin's (2018) study, a focused field inspection was carried out, based on consultation with Mr. Andrew Galvan of the Ohlone Indian Tribe. This resulted in the identifying two areas (one along the south bank of the Patterson Slough and the other near the entry kiosk) of previously unrecorded midden (Basin 2018; see Figure 2).

Based on Basin's (2018) reporting efforts, re-aligning the Patterson Slough Lookout Trail 90-feet west of the Patterson Slough, would avoid the midden along the south bank of the Patterson Slough identified by Mr. Galvan. Basin's (2018) study did not identify cultural or tribal resources within the footprint of, or adjacent to, the proposed trail re-alignment.

Field Survey

On March 8, 2022, Annamarie Leon Guerrero, the Park District's Cultural Services Coordinator, conducted an intensive pedestrian survey of the proposed trail re-alignment corridor. The survey included the maximum width of the proposed trail (10 feet) and a 20-foot buffer on both sides of the proposed alignment. The terrain was flat and open, in an agricultural field. Ground visibility was poor (less than five percent) due to the presence of low-lying grasses. Ground visibility was increased with by employing boot scrapes intermittently along transect lines.

Results and Recommendations

No cultural resources were identified as a result of the field survey.

Although no cultural resources were identified as a result of the survey, based on the number of resources identified within EIR Project area—and the surrounding area—and the findings of previous studies, the overall EIR Project site is extremely sensitive for Native American archaeological resources (Basin 2018).

With the implementation of the mitigation measures identified in the EIR, specifically Mitigation Measures **CUL-3a**, **CUL-3b**, and **CUL-5**, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, and with the presence of an archaeological and tribal monitoring during Project-related ground disturbance, potential Project impacts to Native American cultural and tribal resources would be reduced to a less than significant level.

No further changes to this Project description are anticipated. However, if there are any future changes to the Project, especially in regard to ground-disturbing activities, given the overall sensitivity of the Project site for cultural resources, this could then warrant an additional study and/or investigation by a Secretary of the Interior qualified archaeologist.

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CULTURAL AND TRIBAL RESOURCES ADDENDUM ATTACHMENTS

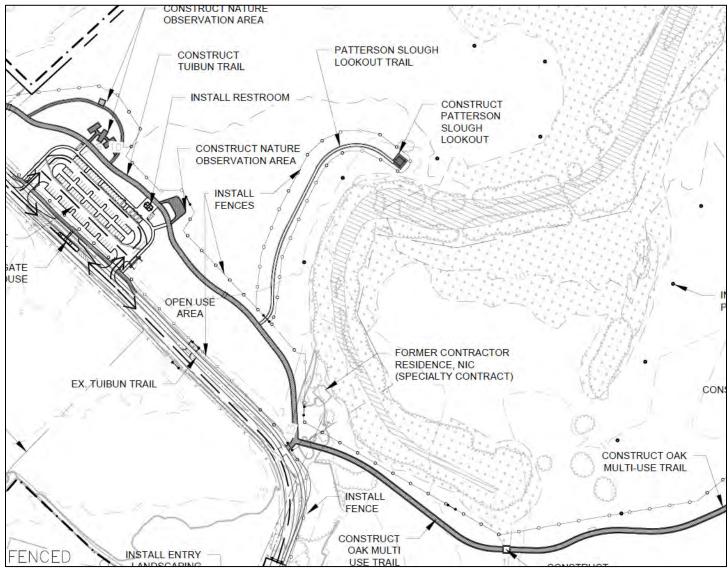


Figure 1: Patterson Slough Lookout Trail alignment, located approximately 90 feet east of the slough.