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

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for the East Bay Regional Park District

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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. Underlined 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.

TABLE 2-1 COMMENT LETTERS AND TRANSCRIPTS ON DRAFT EIR

Date Received	Name	Acronym
FEDERAL AGENCIES		
April 29, 2019	U.S. Fish and Wildlife Service	FWS
STATE AGENCIES		
March 21, 2019	Native American Heritage Commission (G. Totton)	NAHC
LOCAL AGENCIES		
April 19, 2019	City of Fremont (B. Roth)	CF
NON-PROFIT AND 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 AND INDIVIDUALS		
April 3, 2019	Carin High	CH
April 22, 2019	Scott Cashen, MS	SC

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. FWS-1

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,

Chris Barr
Deputy Project Leader,
San Francisco Bay National Wildlife Refuge Complex

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 Gavin Newsom, Governor
NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

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): NAHC-1

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. NAHC-2
   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. NAHC-3
   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. NAHC-4
   d. Mitigation and Conditions language for archaeological resources is not always appropriate for measures specifically for handling Tribal Cultural Resources. NAHC-5

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: http://nahc.ca.gov/resources/forms/. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices". NAHC-6

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 portions 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 1966[8] 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:

a. Alternatives to the project.
b. Recommended mitigation measures.
c. Significant effects.[11]

1. 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.

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.

[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)
[3] Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)
[4] Government Code 65352.3
[5] 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)

b. 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
- Tribal Consultation: 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]
- There is no Statutory Time Limit on Tribal Consultation under the law.
- Confidentiality: 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 http://nahc.ca.gov/resources/forms/.
- 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:
    - If part or the entire APE has been previously surveyed for cultural resources.
    - If any known cultural resources have been already been recorded on or adjacent to the APE.
    - If the probability is low, moderate, or high that cultural resources are located in the APE.
    - 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 coroner~~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.

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)

CITY OF
Fremont

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: kcuero@ebparks.org)

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

1. 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). CF-1
2. Page 4, third paragraph – Change "these ~~three~~ issues in more detail" to "these **four** issues in more detail" CF-2
3. 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. CF-3

   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

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.
- *Street Tree Removal* – Requires a tree removal permit
- 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.

CF-3 (Cont.)

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) cultural resources; and c) air quality due to construction activities such as grading, demolition, and tree and shrub removal, shall implement the adopted standard development requirements to address resource protection provided in FMC Section 18.218.050. CF-4
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 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." CF-5
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 with what has been done recently on similar projects in Fremont. Page 129 of the ADEIR 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? CF-6
7. Page 27, CUL-2a - Has analysis been conducted by a qualified historical architect that substantiates the current condition of the Contractor's Residence? Please include that analysis in the EIR. See also Comment #13. CF-7
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
9. 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-10
11. Page 45, third paragraph – "Voluntary compliance" is mentioned here and throughout the document (DEIR pages 52, 104, 126, and Initial Study pages 4, 10, 20). Is it the Park District's contention that Government Code Section 53091 is not applicable to this project? If so, this position should be clearly explained. CF-11
12. Page 46, second paragraph – typo "1,00 feet" CF-12
13. Page 53, first paragraph - The DPR form the City has on record (2007) indicates the Farm Labor 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 historical architect that substantiates that the condition has deteriorated? This analysis should be provided in the EIR. CF-13
14. Page 54, sixth bullet – Change "City of Fremont (City) ~~Departments~~ of Engineering and Planning" to "City of Fremont (City) **Divisions** of Engineering and Planning." CF-14

15. 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 Quality Analysis that concludes emissions would fall below thresholds such that BAAQMD Table 8-3 mitigation for extensive material transport is not necessary. CF-15
16. Page 69, first paragraph, "(need more information)" CF-16
17. 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 '**Historic Resource**.'" 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,

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 four~~three~~ 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, ~~picnic area if group picnic 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 for~~if~~ 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.~~

- City of Fremont – Elements of the park development plan that could ~~will~~ require approvals from the City of Fremont:

- *Group Picnic Facility* –Depending on the ultimate size and configuration, a Conditional Use Permit (CUP) and Discretionary Design Review.
- *Patterson Ranch Labor Contractors Residence, 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.
- *Grading* – Grading permit.
- *Stormwater Management* – Stormwater management and drainage permit.
- *Street Tree Removal* – Tree removal permit for any City street trees that need to be removed .
- *Bridges* – Requires review by the City Engineering and approval by the City's Floodplain Manager for bridges over FEMA regulatory flood plains.
- *Public Right-of-Way Improvements and Improvements to or Within the Patterson Ranch Road-Paseo Padre Parkway Intersection*-- Requires approval of Project Plans, Encroachment Permits and Construction Agreements.

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. A Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code.

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 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.

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. 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.

[1] Bay Area Air Quality Management District, *California Environmental Quality Act Guidelines*, May 2017, Section 3.5.1, page 3-5.

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 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. 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.

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.

P. ramorum can survive, and appears to reproduce, in watercourses that drain Sudden Oak Death affected areas, which can contain spores of *P. ramorum*. 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.

General

1. *Phytophthora ramorum* 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. Worker Training. Before entering the job site, field workers are to receive training that includes information on Phytophthora diseases and how to prevent the spread of these and other soil-borne pathogens by following approved phytosanitary procedures.

2. 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

3. Vehicles and Large Equipment. 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. Cleaning Equipment and Gear On-site. Scrub, brush and pick off soil, vegetation or other debris 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. Cleaning Area. Cleaning should be conducted on a surface that is unlikely to allow cleaned materials 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. Travel off roads or on unsurfaced roads should be avoided when such roads are wet enough that soil 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. Vehicles should be cleaned before leaving infested areas and before entering new areas.

5. 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.

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. Conform to all federal and state regulations and inspections to prevent the movement of *P. ramorum*-infested nursery stock.

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. The East Bay Hills contains environments conducive to *P. ramorum,* 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. Stay on paved, rocked and well-traveled trails; and avoid cross-country travel, especially under wet conditions.

    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:

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.

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 Historic Resource ~~historic building~~ 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)

From: Dan Ondrasek
To: Karla Cuero
Cc: "C/H High"
Subject: Coyote Hills Restoration and Public Access Project (Patterson Ranch)
Date: Thursday, March 7, 2019 10:43:17 AM

Hello,

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,
Dan Ondrasek
510-789-5616
The Friends of Coyote Hills

FCH1-1

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)

FRIENDS OF COYOTE HILLS

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.” FCH2-1

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

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.

FCH2-1 (Cont.)

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***

FCH2-2

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.

FCH2-2
(Cont.)

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

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.

SCSF1-1

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.

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? 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. https://www.ebparks.org/about/planning/default.htm SCSF1-8

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 Coyote Hills Regional Park is significant. We urge the District to focus on projects that protect and preserve important wildlife/habitat & educational resources. SCSF1-9

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 herbicides/pesticides for this park pursuant to its Integrated Pest Management Program? SCSF1-10

According to the CA Dept of Fish & Wildlife: https://www.fws.gov/birds/bird-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 human-caused 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. SCSF1-11

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. SCSF1-12

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 SCSF1-13

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:

SCSF1-14

Avoid activity that disturbs nesting behavior Jan to August[1]

- Conduct activities in accordance with the new California MBTA and all applicable state environmental laws. [2]

- 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

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[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] https://oag.ca.gov/news/press-releases/attorney-general-becerra-and-california-department-fish-and-wildlife-issue-legal
"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. SCSF1-24

Farming Impact Issues

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;
2) Planting and harvesting row crops does not sequester carbon; SCSF1-26
3) Deep-rooted vegetation, such as forage vegetation with controlled amount of grazing, or trees, is the best choice for permanently sequestering carbon; SCSF1-27
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." SCSF1-30 (Cont.)
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 co-benefit 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. SCSF1-31

Comment #3 - <u>Deep-rooted vegetation, such as forage vegetation with controlled amount of grazing, or trees, is the best choice for permanently sequestering carbon.</u> 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. "In less than a decade, management-intensive grazing SCSF1-32

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 https://youtu.be/sqdZ8ydVXcM

SCSF1-32 (Cont.)

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.

SCSF1-33

Comment #4 – The farm produce stand adds no value to the park experience. 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.

SCSF-34

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..

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".
https://fremont.gov/DocumentCenter/View/19837/Climate-Action-Plan

SCSF1-36

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. https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks

"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…."

SCSF1-37

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

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. SCSF1-37 (Cont.)

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 SCSF1-38

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. SCSF1-39

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. SCSF1-40

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. SCSF1-41

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 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 SCSF1-47

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.

SCSF1-47 (Cont.)

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.

SCSF1-48

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."

SCSF1-49

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.

SCSF1-50

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?

SCSF1-51

We note that the Sierra Club San Francisco Bay Chapter Transportation and Compact Growth Committee may provide additional comments on transportation issues.

SCSF1-52

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,

SCSF1-53

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. SCSF1-53 (Cont.)

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. SCSF1-54

Sincerely yours,

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.

Response SCSF1-5

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.

Response SCSF1-11

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. 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.

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. Feral Animals – Consider establishing a program to control feral animals such as feral cats non-native species such as red fox, and native species that are pests such as cowbirds, ground squirrels, and cowbirds.
   d. Riparian and Emergent Marsh Dependent Special Status Bird Species - (common yellow throat, song sparrow, Swainson's hawk, tree swallow, tricolored blackbird, willow flycatcher, yellow-breasted chat, yellow warbler) Consider their habitat requirements in developing Restoration Plan.
   e. Bats - Consider developing and implementing a program to protect bat species, including providing artificial roosts within Patterson Slough.
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. Tri-colored Blackbird - Consider improving nesting and foraging habitat.
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.

Response SCSF1-25

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.

Response SCSF1-30

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.

Response SCSF1-34

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 Plan[2] 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=

Response SCSF1-43

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 Plan[3] 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 Plan[4] 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. SCSF2-1

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". SCSF2-2
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

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. https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks:

"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.

SCSF2-3

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, balance traffic congestion, reduce GHG/VMT, ensure public safety

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

fails to include traffic data from days when the Park is busy thus failing to inform the public of the full impact of the project. SCSF2-7 (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 resources to the park? The DEIR fails to address how EBRPD will ensure public safety /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. SCSF2-8

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. SCSF2-9

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 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. SCSF2-10

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. SCSF2-11

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 SCSF2-12

without need for a personal vehicle is in place for park visitors before additional facilities are open to the public. SCSF2-12 (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 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." SCSF2-13

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 connectivity with City of Fremont Bicycle/Pedestrian Master Plans. SCSF2-14

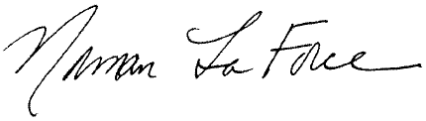
The DEIR also fails to outline a District Climate Vision goal to have X% of visitors access parks by public transit, bike, pedestrian. The DEIR fails to state specifically what EBRPD is doing to work with transit agencies and/or City Councils to ensure linkage to City of Fremont Bike/Ped Master Plans and/or development of public transit routes that include access to Coyote Hills Regional Park. SCSF2-15

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 implementations to match visitor numbers to park capacity, address historical aspects, and 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. SCSF2-16

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. SCSF2-17

Sincerely yours,



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. CNPS-1

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) <u>Inadequate description of baseline Biological Resources</u>

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-2

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. CNPS-3

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). CNPS-4

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. CNPS-5

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-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.

CNPS-6 (Cont.)

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."

CNPS-7

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.

CNPS-8

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 (CNPS Botanical Survey Guidelines, CNPS, June 2001).

CNPS-9

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

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. CNPS-9 (Cont.)

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) <u>Inadequate Mitigation Measures</u>

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. CNPS-10

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. CNPS-11

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). CNPS-12

   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",

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." CNPS-12 (Cont.)

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. CNPS-13

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-14

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.)

e. 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).

CNPS-15

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).

CNPS-16

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

CNPS-17

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,

Jim 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

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: Various Date: From 1990 to 2013 Author: 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.
Report: Patterson Ranch Development Project EIR Date: 2010 and 2013 Author: 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
Report: Rare Plant Survey Date: June 27, 2016 Author: 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)
Report: Rare Plant Survey Date: September 1, 2016 Author: 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.
Report: Wetland Delineation Date: April 11, 2017 Author: Jane Valerius	"Remain(der) of the project area," or outside of the SWNU	No information	• Reference found on page 103

Report Title, Date, and Author	Project Area	Results	Comments/Questions
Report: Wetland Delineation Date: May 2, 2017 Author: Jane Valerius	"Remain(der) of the project area," or outside of the SWNU	No information	• Reference found on page 103
Report: Coyote Hills Restoration and Public Access Project – Existing Conditions and Opportunities and Constraints Report Date: September 2018 Author: Questa Engineering Corp. (Dr. Sam McGinnis and Jane Valerius)	The Entire Project Area?	Summarized throughout DEIR, according to statement on pg. 65	• Reference found on page 65

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
Appendix E: Special Status Species Studies

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 subsequent reports are added at the end of the DEIR:

Appendix E

Special Status Species Studies:

- California Red-Legged Frog (CRLF) surveys of Patterson Slough and Line P by Pacific Biology (Sept. 2007) and H.T. Harvey (Aug. 2001).
- 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*), , 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).*

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:

- T~~o facilitate preparation of the Plan, t~~he 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.), ~~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, ~~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.

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

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April 22, 2019

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. GGAS-1

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 GGAS-2

[1] p104. dEIR

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 special-status 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 on130 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. GGAS-2 (Cont.)

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-3

[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. GGAS-3 (Cont.)

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. GGAS-4

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.

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[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.

GGAS-5

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: https://baylandsgoals.org/wp-content/uploads/2015/10/BEHGU_SFC4.pdf

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. GGAS-7

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. GGAS-8

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[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).*"

[13] 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
"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

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." GGAS-9

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. GGAS-10

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-11

[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.

GGAS-11 (Cont.)

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.

GGAS-12

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.

GGAS-13

Respectfully,

Pam Young

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Chair, GGAS East Bay Conservation Committee pamyoung2@mac.com

[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 listed in dEIR Table 4-1; GGAS-14

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; GGAS-15

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). GGAS-16

1. dEIR Special Status Birds List vs CDFW Special Animals List

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
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

GGAS-17

	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

GGAS-17 (Cont.)

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	22 Mar 1970	Richard Erickson
Brant: SSC	1	28 Aug 2011	logan kahle
Redhead: SSC	4	16 Dec 2018	Jerry Ting
Barrow's Goldeneye	1	1 Jan 2019	Jerry Ting
Vaux's Swift: SSC	1	19 Sep 2018	Bob Dunn
Costa's Hummingbird: BCC	1	6 Sep 2008	Patricia Bacchetti

GGAS-18

Rufous Hummingbird: BCC	1	23 Sep 2018	William Clark
Sandhill Crane: Lesser (SSC) or greater (FP)?	1	2 Oct 2017	David Yeamans
Long-billed Curlew: SWL, BCC	2	30 Mar 2019	Sara Hall
California Gull: CWL	2	17 Apr 2019	vijay t
Caspian Tern: BCC	2	3 Nov 2018	Dean LaTray
Elegant Tern: CWL	7	3 Nov 2018	Henry Burton
Black Skimmer: SSC	1	18 Jul 2016	Jerry Ting
Common Loon: SSC	1	13 Oct 2018	Dorian Anderson
Double-crested Cormorant: CWL	3	14 Apr 2019	Bob Dunn
American White Pelican: SSC	1	14 Apr 2019	J Tanner
Brown Pelican: CFP	10	13 Dec 2018	J Tanner
White-faced Ibis: CWL	2	15 Mar 2019	J Tanner
Bald Eagle: Federally Delisted, CE, CFP, BCC	1	29 Mar 2019	J Tanner

GGAS-18 (Cont.)

Swainson's Hawk: ST, BCC	X	23 Nov 2012	Jim Ford
Olive-sided Flycatcher: SSC, BCC	1	8 May 2018	J Tanner
Willow Flycatcher: SE, BCC	1	22 Sep 2018	Elizabeth Olin
	2	16 Mar	Carla Delucchi

Lawrence's Goldfinch: BCC		2008	
Grasshopper Sparrow: SSC	1	18 Sep 2018	J Tanner

GGAS-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)

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:

GGAS-19

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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Science Foundation Chapter 5: Risks from Future Change for Wildlife
Found at: https://baylandsgoals.org/wp-content/uploads/2015/10/BEHGU_SFC5.pdf

Baylands Ecosystem Habitat Goals Science Update (2015)
Science Foundation Chapter 4 Connections to the Watersheds: The Estuarine-Terrestrial Transition Zone
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Response to Comments GGAS-1 through GGAS-19

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 melodia 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.~~

Scientific Name **Common Name**	**Federal / State Status**	**Other Status**	**Habitat Association**	**Potential for Occurrence in Project area**
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 (*Scirpus spp.*), cordgrass (*Spartina spp.*), and pickleweed (*Salicornia spp.*), 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.
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)

~~*Scientific Name* 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 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 10th 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.~~

~~*Scientific Name* Common Name~~	~~Federal / State Status~~	~~Other Status~~	~~Habitat Association~~	~~Potential for Occurrence in Project area~~
~~***Circus cyaneus***~~ ~~**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.~~
~~***Ripatia ripatia***~~ ~~**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.~~

Scientific Name **Common Name**	**Federal / State Status**	**Other Status**	**Habitat Association**	**Potential for Occurrence in Project area**
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 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.
Asio flammeus **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.
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.

~~*Scientific Name* Common Name~~	~~Federal / State Status~~	~~Other Status~~	~~Habitat Association~~	~~Potential for Occurrence in Project area~~
~~***Falco mexicanus*** **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.~~
~~***Falco columbarius*** **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.~~
~~***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.~~
~~***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**~~				
~~***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.~~

Scientific Name **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.
Myotis thysanodes **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				
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				
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 .

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Lepidurus packardi **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 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 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:**

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

Scientific Name 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.	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.
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 (*Scirpus spp.*), cordgrass (*Spartina spp.*), and pickleweed (*Salicornia spp.*), 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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Rallus longirostris obsoletus **California Clapper (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 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.
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.
Agelaius tricolor **Tricolored Blackbird**	State Threatened (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	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.

Scientific Name Common Name	Federal / State Status	Other Status	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 10th 2007.) Species has also been observed west of the Project area 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 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. 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.
Circus cyaneus **Northern Harrier**	None	CSC	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 Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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.	Low Potential: A possible colony was noted in a 1983 CNDDB observation within the Project area; no other individuals have been observed to date.
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.
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.
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: 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.

Scientific Name Common Name	Federal / State Status	Other Status	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.
Asio flammeus **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.
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.
Falco mexicanus **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: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Falco columbarius **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.
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.
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.
Dendroica petechia brewstri **Yellow warbler**	None	CSC, BCC	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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in 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 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.
Dendrocygna bicolor **Fulvous Whistling Duck**	None	CSC	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.
Aythya Americana **Redhead**	None	CSC	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.

Scientific Name Common Name	Federal / State Status	Other Status	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.
Bucephala islandica **Barrow's Goldeneye**	None	CSC	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.
Chaetura vauxi **Vaux's Swift**	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.
Calypte costae **Costa's Hummingbird**	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 Common Name	Federal / State Status	Other Status	Habitat Association	Potential for 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.
Antigone canadensis **Sandhill Crane**	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
Numenius americanus **Long-Billed Curlew**	None	CWL, BCC	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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Larus californicus **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.
Thalasseus elegans **Elegant Tern**	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 Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Rynchops niger **Black Skimmer**	None	CSC	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.
Gavia immer **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.

Scientific Name Common Name	Federal / State Status	Other Status	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.
Pelecanus occidentalis *Brown Pelican*	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.
Plegadis chihi White-faced Ibis	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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Haliaeetus leucocephalus **Bald Eagle**	California Endangered Federally Delisted	CFP, BCC	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.
Buteo swainsoni **Swainson's Hawk**	State Threatened	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	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Contopus cooperi **Olive-sided Flycatcher**	None	CSC, BCC	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.
Empidonax traillii **Willow Flycatcher**	State 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).	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.
Spinus lawrencei **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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Ammondramus savannarum **Grasshopper Sparrow**	None	CSC	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				
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.
Reithrodontomys raviventtris **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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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.
Myotis thysanodes **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
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

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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.
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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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				
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 .
Lepidurus packardi 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 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 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.	

The description of Tricolored Blackbird, on page 93of the Draft EIR, is edited as follows:

Tricolored Blackbird (*Agelaius tricolor*) – California Threatened, 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 for the recently acquired 306-acres once part of Patterson Ranch. CCCR-1

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. CCCR-2

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. CCCR-2 (Cont.)

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] CCCR-3

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 Report[2] 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 al[3]: "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] CCCR-4

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)*,

[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 .]

[3] Stanford B et al. pages 166-167

[4] *Ibid.*

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: Pacific-slope 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.

CCCR-4 (Cont.)

The Goals Project[5] 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

[5] Goals Project. 1999. Page 135

to by Josh Collins of the San Francisco Estuary Institute[6] 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. CCCR-4 (Cont.)

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 these plant materials be sourced? Will cuttings come from the existing willow groves and riparian forests? 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: CCCR-5

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

[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/

a. Site Preparation
    i. Weed Seed Bank Management
    ii. Protection of Unique Plant Populations
    iii. Grading
    iv. Soil Preparation
    v. 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
        1. Where and When to Irrigate
        2. Access to Water/Need for Water Lines/Use of Existing Wells
        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. Maintenance and Monitoring – Is EBRPD reaching its goals?
    a. Maintenance – How will the restoration sites be maintained?
        i. Types of Maintenance Activities and Timing
        ii. Staffing
        iii. Budget
    b. Monitoring
        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. Triggers for Actions

CCCR-5 (Cont.)

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

CCCR-6

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 Hills[10]? 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 Service[11]. 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. CCCR-7

[7] http://calag.ucanr.edu/archive/?article=ca.2018a0035

[8] http://www.suddenoakdeath.org/wp-content/uploads/2016/02/2.19.16_Associated-host-list-of-Phytophthora-tentaculata.pdf

[9] http://www.suddenoakdeath.org/wp-content/uploads/2015/02/P.tentaculata.Pest_.Alert_.022315.pdf

[10] http://phytosphere.com/soilphytophthora/Issues_implications_Phytophthora_container_stock.htm

[11] http://www.suddenoakdeath.org/welcome-to-calphytos-org-phytophthoras-in-native-habitats/resources/

[12] http://www.suddenoakdeath.org/wp-content/uploads/2018/06/Phytosphere.GGNPC_.BMPS_.Trails.Construction.Soil_.Import.31Jan2018.pdf

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 endangerment associated with physical disruption of the features, i.e. trampling of habitat, etc.? Or does this term encompass disruption of ecosystem function for wildlife as well? CCCR-7 (Cont.)

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 2005[13] 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] CCCR-8

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 habitat 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. CCCR-9

Miller, Knight and Miller 1998[14] 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 2000[15] summarized studies of human disturbance on breeding birds: CCCR-10

> "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

[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 effects are possible even if the forest canopy is not opened by the trail (Hickman 1990). "

CCCR-10 (Cont.)

Fletcher, McKinney and Bock 1999[16] 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).

CCCR -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."

CCCR -12

- 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.

CCCR-13

The LUPA states (Page 102):

"The basins will be planted and seeded using a mix of native seasonal wetlands and emergent marsh

CCCR-14

[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. ***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."*

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 studies[18] 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?

CCCR-14 (Cont.)

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, <u>although the extent of additional recreation and public access facilities has not yet been determined.</u>

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:

CCCR-15

> 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]

[18] *Ibid.*

Phase 2 proposed public access actions at the ELER include a "through-trail from northern Eden Landing to the Southern Ponds...constructed on improved levees (elevation 12 feet, NAVD88). A footbridge would be constructed over the connection to the J-ponds... In addition, the bridge over the ACFCC at the Alameda Creek Regional Trail would be included."

CCCR-15 (Cont.)

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 levees[19]. 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 Plan[20] states:

CCCR-16

> 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:

CCCR-17

> 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

[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. CCCR-17 (Cont.)

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 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. CCCR-18

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. CCCR-20

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. CCCR-20 (Cont.)

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 wildlife-oriented 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 ½ 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 rail[5].

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 conditions[6].

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 erosion[7]. 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 sidewalk[8]. 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:

Use	Acres	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, and public access and recreational facilities. 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, and 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 Regional Park. 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 technical aspects of implementation options 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 and implementation actions 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

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May 7, 2019

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-1

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 a continuous open shoreline in the East Bay. In doing this you are taking part in the much larger effort to preserve the fragile ecosystems that are under assault by climate change. Thank you. CESP-2

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. CESP-3

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. CESP-4

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. Given the continued assault on habitat, CESP believes the Park District needs to further study any pesticide use for the area under question and believes pesticide use would contradict the goals to protect and expand habitat. CESP-5

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. CESP-6

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. CESP-7

Sincerely,

Shirley Dean

Robert Cheasty

Shirley Dean, CESP President

Robert Cheasty, CESP Executive Director

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
- Carin emailed to ask for Questa existing conditions report and report from Sam McGinnis 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 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.~~

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. SC-1

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. SC-2

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. SC-3

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]

SC-4

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

[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. SC-4 (Cont.)

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. SC-5

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-6

[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.

SC-6 (Cont.)

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]

SC-7

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-8

[8] DEIR, p. 192.

> 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.[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.

SC-8 (Cont.)

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.

SC-9

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

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[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.

SC-9 (Cont.)

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.

SC-10

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.

SC-11

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-12

[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]

SC-12 (Cont.)

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-13

[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]

SC-13
(Cont.)

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 areas[33] "will allow wildlife unimpeded movement."[34] If this statement is correct, the fencing will also allow unimpeded movement of dogs.

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[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] SC-13 (Cont.)

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-14

[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] SC-15

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: SC-16

[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. SC-16 (Cont.)

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] SC-17

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.

SC-17 (Cont.)

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: "[l]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]

SC-18

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 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

[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 that the Project's incremental contribution to the significant cumulative impact would not be considerable.

SC-18 (Cont.)

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-19

[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.

SC-19 (Cont.)

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.

SC-20

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.

[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.

SC-20 (Cont.)

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.

SC-21

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

[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.

SC-21
(Cont.)

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.

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[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.*

[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].

[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, CEQA mandates that the District identify in the DEIR the specific mitigation and monitoring plan needed to reduce impacts to less-than-significant levels; it cannot defer that responsibility to the CDFW after the CEQA 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.

SC-21 (Cont.)

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 yellowthroat 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.

SC-22

<u>Tricolored Blackbird</u>

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-23

[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 K-line 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.

SC-23 (Cont.)

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.

SC-24

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]

SC-25

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.

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[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. SC-25 (Cont.)

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-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.

SC-26 (Cont.)

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.

[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-than-significant levels. If this was the case, there would never be the need for a lead agency to issue a statement of overriding considerations. SC-27

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-than-significant 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. 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.

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 unauthorized/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 s~~Steep-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:

- 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.
    - 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.
    - 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.
    - 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.

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 pre-construction 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*" (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-1i, 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. Underline 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
Appendix E: Special Status Species Studies

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, ~~picnic area if group picnic 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 for~~if~~ 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 four~~three~~ 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 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.~~

- City of Fremont – Elements of the park development plan that could ~~will~~ require approvals from the City of Fremont:
  - *Group Picnic Facility* –Depending on the ultimate size and configuration, a Conditional Use Permit (CUP) and Discretionary Design Review.
  - *Patterson Ranch Labor Contractors Residence, 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.
  - *Grading* – Grading permit.
  - *Stormwater Management* – Stormwater management and drainage permit.
  - *Street Tree Removal* – Tree removal permit for any City street trees that need to be removed .
  - *Bridges* – Requires review by the City Engineering and approval by the City's Floodplain Manager for bridges over FEMA regulatory flood plains.
  - *Public Right-of-Way Improvements and Improvements to or Within the Patterson Ranch Road-Paseo Padre Parkway Intersection*-- Requires approval of Project Plans, Encroachment Permits and Construction Agreements.

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. 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 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 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. 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.

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 s~~Steep-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:

- T~~o facilitate preparation of the Plan, t~~he 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.), ~~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:

- 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.
    - 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.
- 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.

  - 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.

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:

- 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 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. A Conditional Use Permit shall be required in accordance with Table 18.55.110 of the Fremont Municipal Code.

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 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.

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 coroner~~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.

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 unauthorized/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.

P. ramorum can survive, and appears to reproduce, in watercourses that drain Sudden Oak Death affected areas, which can contain spores of *P. ramorum*. 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.

General

1. *Phytophthora ramorum* 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. Worker Training. Before entering the job site, field workers are to receive training that includes information on Phytophthora diseases and how to prevent the spread of these and other soil-borne pathogens by following approved phytosanitary procedures.

2. 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

3. Vehicles and Large Equipment. 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. Cleaning Equipment and Gear On-site. Scrub, brush and pick off soil, vegetation or other debris 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. Cleaning Area. Cleaning should be conducted on a surface that is unlikely to allow cleaned materials 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. Travel off roads or on unsurfaced roads should be avoided when such roads are wet enough that soil 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. Vehicles should be cleaned before leaving infested areas and before entering new areas.

5. 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.

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. Conform to all federal and state regulations and inspections to prevent the movement of *P. ramorum*-infested nursery stock.

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. The East Bay Hills contains environments conducive to *P. ramorum,* 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. Stay on paved, rocked and well-traveled trails; and avoid cross-country travel, especially under wet conditions.

    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.

Page 73

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. 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.

Page 74

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).*

Page 80

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 melodia 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.~~
~~***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 (*Scirpus spp.*), cordgrass (*Spartina spp.*), and pickleweed (*Salicornia spp.*), 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.~~

~~*Scientific Name* Common Name~~	~~Federal / State Status~~	~~Other Status~~	~~Habitat Association~~	~~Potential for Occurrence in Project area~~
~~***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)~~
~~***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 10th 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.~~

~~*Scientific Name* Common Name~~	~~Federal / State Status~~	~~Other Status~~	~~Habitat Association~~	~~Potential for Occurrence in Project area~~
~~***Circus cyaneus***~~ ~~**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.~~
~~***Ripatia ripatia***~~ ~~**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.~~

~~*Scientific Name* Common Name~~	~~Federal / State Status~~	~~Other Status~~	~~Habitat Association~~	~~Potential for Occurrence in Project area~~
~~***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 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.~~
~~***Asio flammeus*** **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.~~
~~***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.~~

~~*Scientific Name* Common Name~~	~~Federal / State Status~~	~~Other Status~~	~~Habitat Association~~	~~Potential for Occurrence in Project area~~
~~***Falco mexicanus*** **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.~~
~~***Falco columbarius*** **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.~~
~~***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.~~
~~***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				
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.

Scientific Name **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.
Myotis thysanodes **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				
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				
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 .

Scientific Name **Common Name**	**Federal / State Status**	**Other Status**	**Habitat Association**	**Potential for Occurrence in Project area**
Lepidurus packardi **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 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 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:**

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

Scientific Name 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.	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.
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 (*Scirpus spp.*), cordgrass (*Spartina spp.*), and pickleweed (*Salicornia spp.*), 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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Rallus longirostris obsoletus **California Clapper (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 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.
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.
Agelaius tricolor **Tricolored Blackbird**	State Threatened (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	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.

Scientific Name Common Name	Federal / State Status	Other Status	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 10th 2007.) Species has also been observed west of the Project area 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 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. 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.
Circus cyaneus **Northern Harrier**	None	CSC	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 Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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.	Low Potential: A possible colony was noted in a 1983 CNDDB observation within the Project area; no other individuals have been observed to date.
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.
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.
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: 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.

Scientific Name Common Name	Federal / State Status	Other Status	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.
Asio flammeus **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.
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.
Falco mexicanus **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: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Falco columbarius **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.
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.
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.
Dendroica petechia brewstri **Yellow warbler**	None	CSC, BCC	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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in 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 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.
Dendrocygna bicolor **Fulvous Whistling Duck**	None	CSC	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.
Aythya Americana **Redhead**	None	CSC	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.

Scientific Name Common Name	Federal / State Status	Other Status	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.
Bucephala islandica **Barrow's Goldeneye**	None	CSC	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.
Chaetura vauxi **Vaux's Swift**	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.
Calypte costae **Costa's Hummingbird**	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 Common Name	Federal / State Status	Other Status	Habitat Association	Potential for 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.
Antigone canadensis **Sandhill Crane**	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
Numenius americanus **Long-Billed Curlew**	None	CWL, BCC	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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Larus californicus **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.
Thalasseus elegans **Elegant Tern**	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 Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Rynchops niger **Black Skimmer**	None	CSC	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.
Gavia immer **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.

Scientific Name Common Name	Federal / State Status	Other Status	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.
Pelecanus occidentalis ***Brown Pelican***	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.
Plegadis chihi **White-faced Ibis**	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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Haliaeetus leucocephalus **Bald Eagle**	California Endangered Federally Delisted	CFP, BCC	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.
Buteo swainsoni **Swainson's Hawk**	State Threatened	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	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Contopus cooperi **Olive-sided Flycatcher**	None	CSC, BCC	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.
Empidonax traillii **Willow Flycatcher**	State 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).	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.
Spinus lawrencei **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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
Ammondramus savannarum Grasshopper Sparrow	None	CSC	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				
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.
Reithrodontomys raviventtris 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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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.
Myotis thysanodes **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
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

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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.
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.

Scientific Name Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
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				
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 .
Lepidurus packardi 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 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 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.

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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:

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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.~~

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The description of Tricolored Blackbird is edited as follows:

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

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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.

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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 s~~Steep-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.

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The second bullet of Mitigation Measure BIO-1b is edited as follows:

- T~~o facilitate preparation of the Plan,~~ 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.), ~~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:

- 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.
    - 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.
  - 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.
  - 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.

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 (California Endangered Species Act) as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.".

Page 118

Mitigation Measure BIO-1i 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 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.

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 Historic Resource ~~historic building~~ 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 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.

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 coroner~~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.

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. 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 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 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. 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.

Appendix E

The following Appendix E cover sheet and subsequent reports are added at the end of the DEIR:

Appendix E

Special Status Species Studies:

- California Red-Legged Frog (CRLF) surveys of Patterson Slough and Line P by Pacific Biology (Sept. 2007) and H.T. Harvey (Aug. 2001).
- 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)

H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

PATTERSON RANCH
BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

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December 4, 2001 (revised 2 April 2004)

Project No. 657-08

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FIGURES:

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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.

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H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

Patterson Ranch: Site / Vicinity Map

File No. 657-08	Date 3/31/04	Figure 1

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

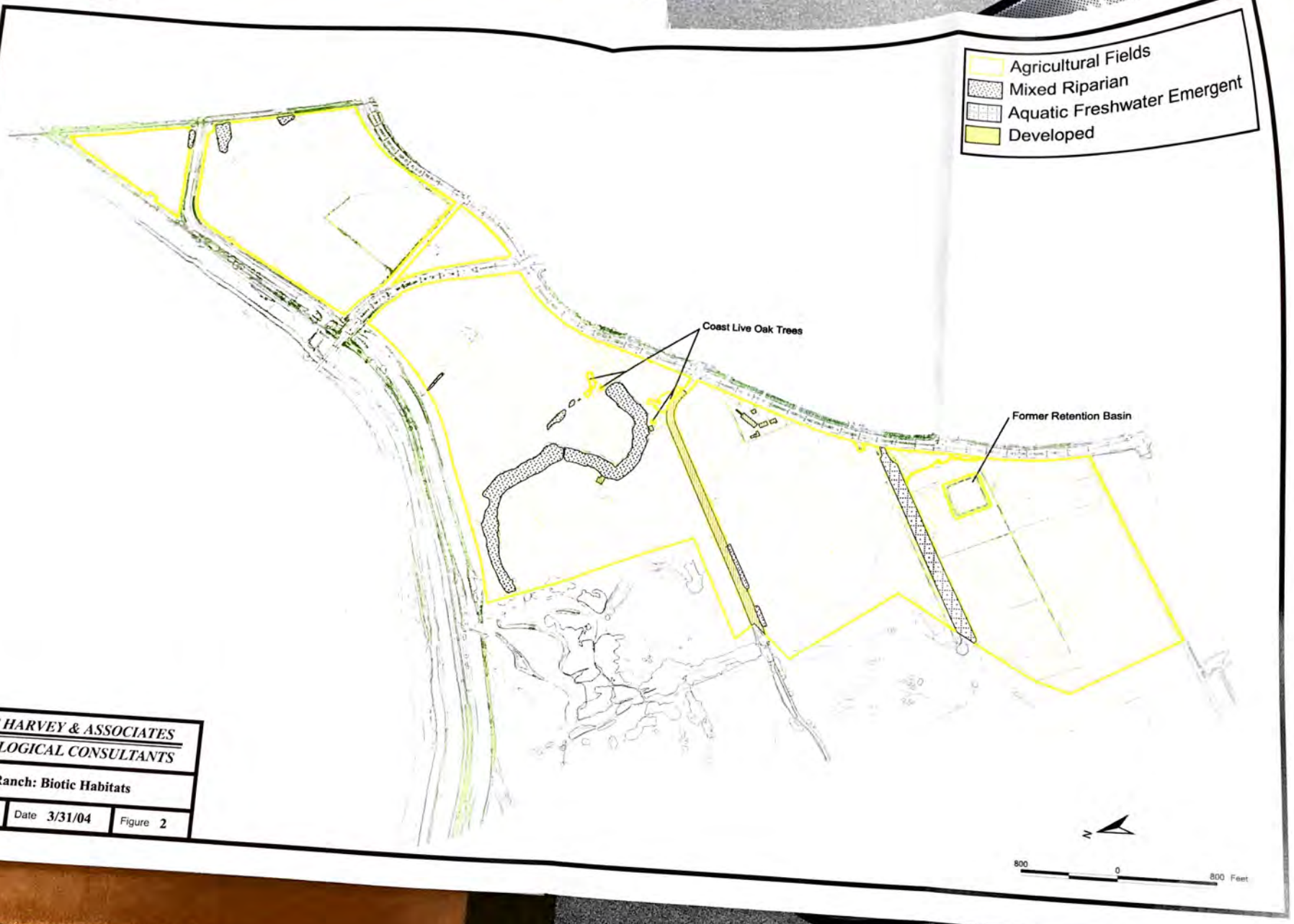
Agricultural fields habitat occupies the vast majority of the study area (Figure 2). These fields and surrounding agricultural access roads comprise recently disked areas characterized by bare, disturbed soils that currently support little vegetation. Agricultural fields on the property are managed to 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.


Agricultural Fields
Mixed Riparian
Aquatic Freshwater Emergent
Developed
Coast Live Oak Trees
Former Retention Basin
N
800
0
800 Feet
H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS
Patterson Ranch: Biotic Habitats
File No. 657-08
Date 3/31/04
Figure 2



H.T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

Patterson Ranch: Biotic Habitats

File No. 657-08	Date 3/31/04	Figure 2

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 fern (*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's-beak (*Cordylanthus maritimus* ssp. *palustris*), Diablo helianthella (*Helianthella castanea*), big-scale 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 jewel-flower (*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.

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
Federal or State Endangered Species			
Contra Costa goldfields (*Lasthenia conjugens*)	FE, CNPS 1B	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*)	FE	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			
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			
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 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 area.	Observed foraging immediately adjacent to the site, and expected to forage on the site. No breeding habitat on or near the site.

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.
California 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.

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
State Protected Species or CNPS Species			
Alkali milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grassland.	Potential habitat exists on site. Species determined to be absent.
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**

FE = Federally listed Endangered
FT = Federally listed Threatened
ST = State listed Threatened
FPE = Federally proposed Endangered
FC = Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened
CSSC = California Species of Special Concern
SP = State Protected Species
CNPS 1A = Plants presumed extinct in California
CNPS 1B = Plants rare, threatened, or endangered in California and elsewhere

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 on-going 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 on-going 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 Burrowing Owls, 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 red-legged frog 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.

Surveys for Burrowing Owls 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 California tiger salamander 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. Surveys for this species conducted during 2002-03 proved negative (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,

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.

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

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Ranch: Special Status Wildlife Species: Observed and Potential Habitat

7-08 | Date **3/31/04** | Figure **3**

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, highway 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 farm-road bridge is likely to be removed if the site is developed. The third was inside a box culvert 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 nesting 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.

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

Prepared for:

Richard Frisbie
Frisbie Planning
109 Baldwin Avenue
San Mateo, CA 94401

9 May 2003

Project 657-08

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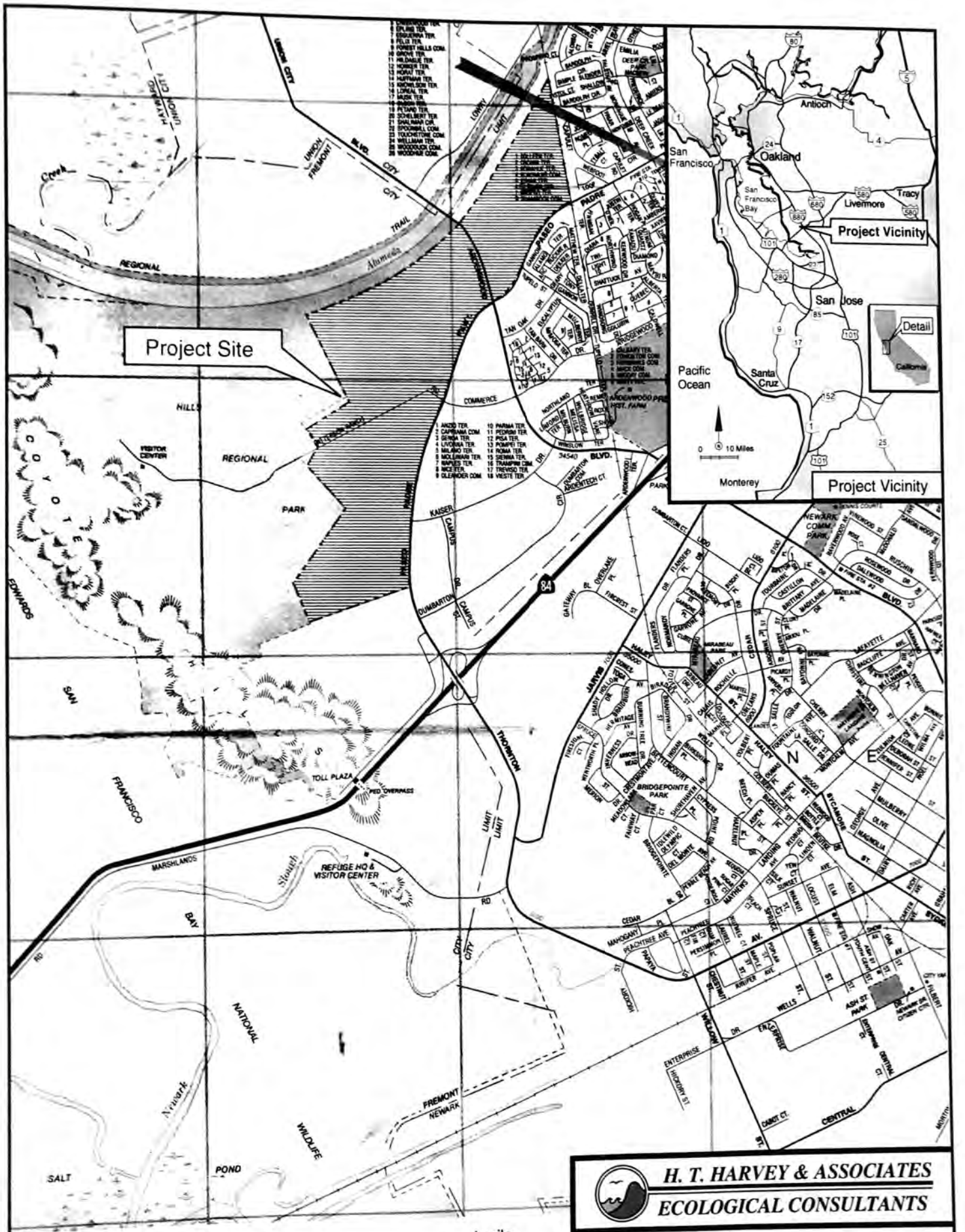
FIGURES:

INTRODUCTION

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.



Map Copyrighted June 1997 by the California State Automobile Association. Reproduced by permission.

H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

Ardenwood 2000: Site / Vicinity map

File No. 657-06	Date 12/4/01	Figure 1

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. Hand-held 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

2002-2003 Wet Season Branchiopod Survey Report

Patterson Ranch
Fremont, Alameda County, California

November 5, 2003

Prepared for:
The Frisbie Planning Company
109 Baldwin Avenue
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Prepared by:
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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).

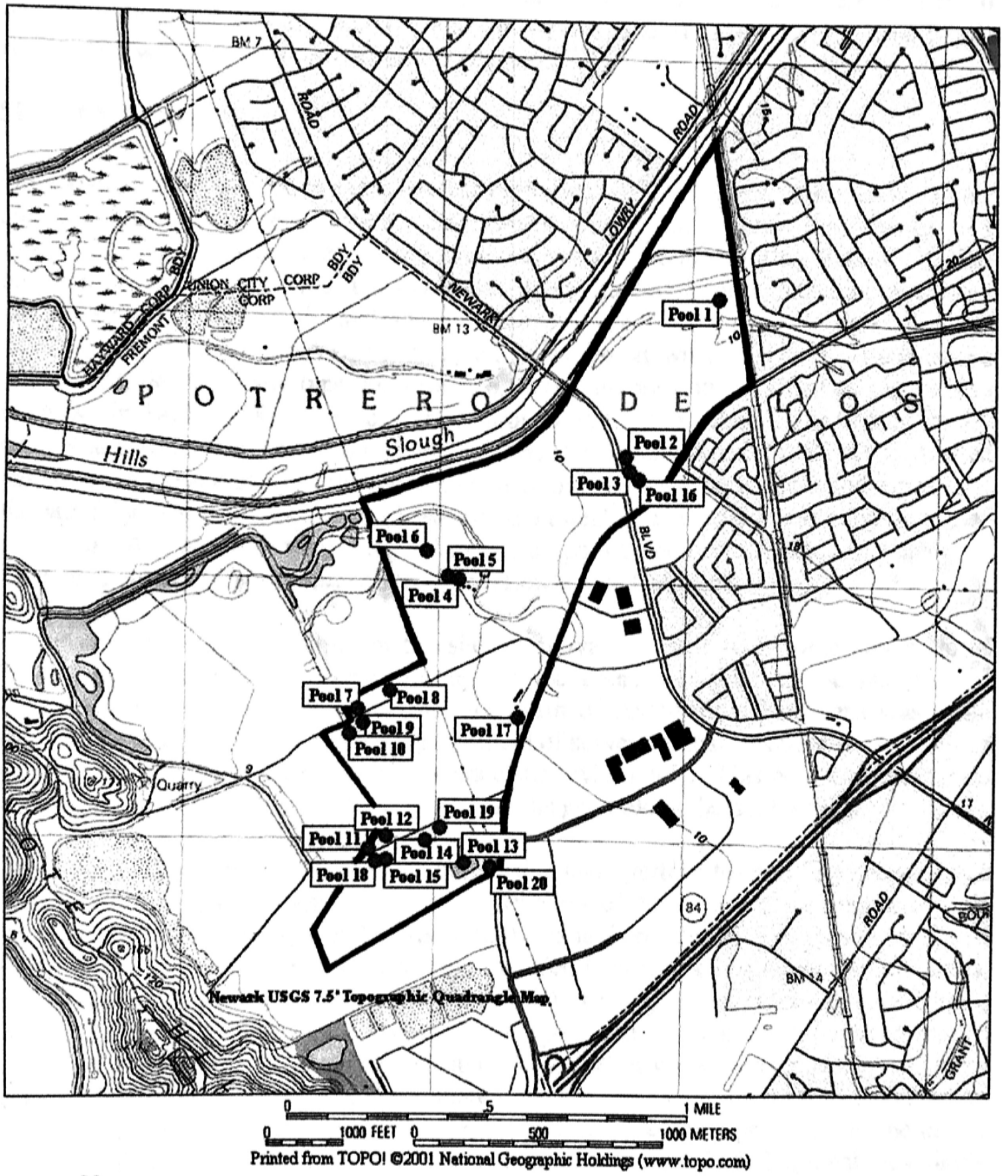
Wendy Weber of Condor Country Consulting conducted surveys to determine the extent of suitable habitat and the distribution of vernal pool branchiopods within the property boundaries. Verbal approval to conduct the surveys was received from Vincent Griego of the USFWS on December 23, 2002. Written authorization (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



Condor Country

Patterson Ranch Site

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).

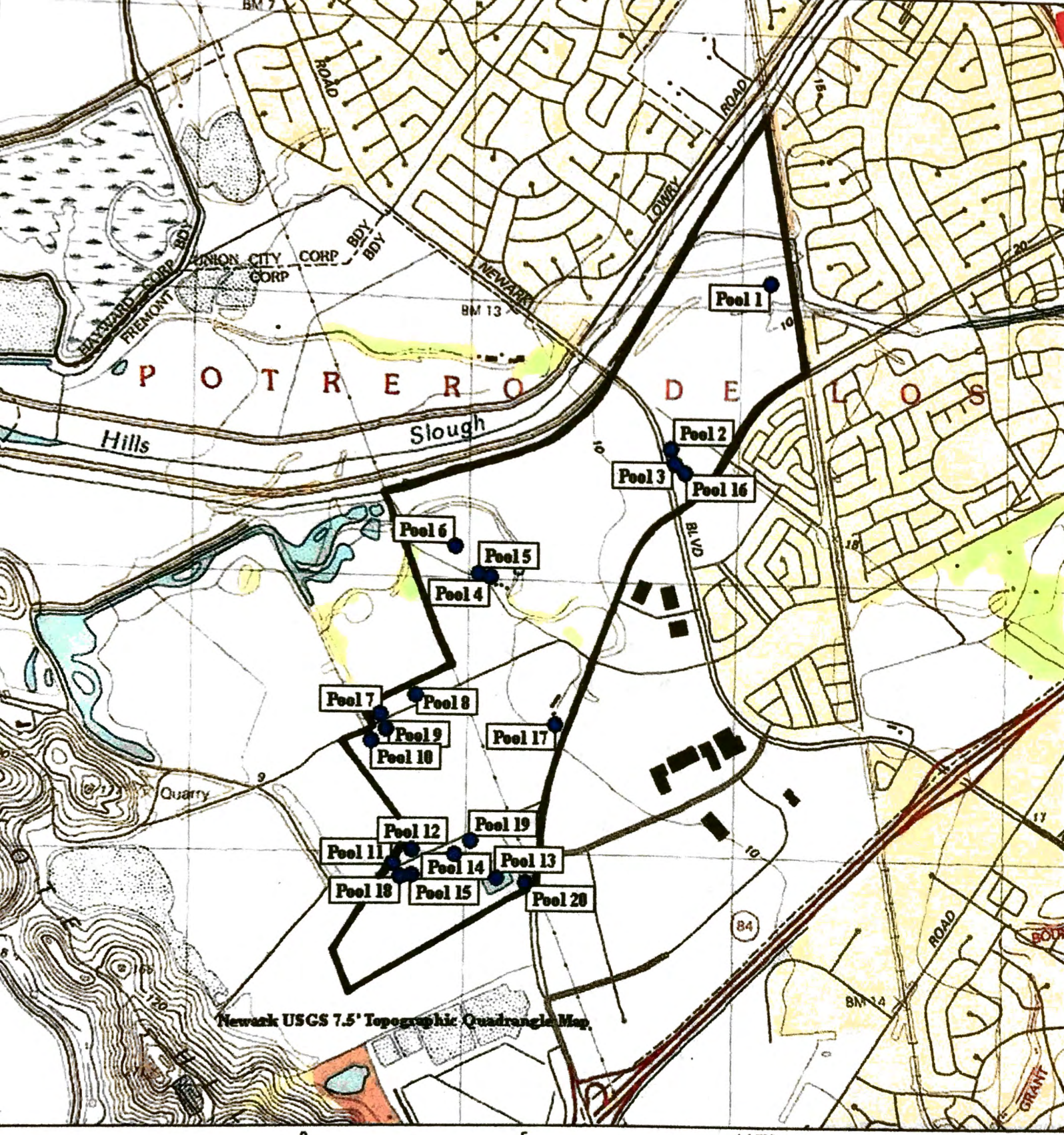
SURVEY RESULTS

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 dimensions, depth, habitat type, location, and faunal composition identified during surveys is 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 marsh" is in areas that were converted to agriculture and have been cultivated for at least the last fifty years (Frisbie 2000). Two irrigation ditches and a detention pond were also surveyed. Although not typical habitat for vernal pool branchiopods, listed branchiopods have been collected from these habitat types elsewhere in California.

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 and 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.



0 .5 1 MILE

0 1000 FEET 0 500 1000 METERS

N

● Pool Location ■ Site Boundary

Condor Country Consulting	**Patterson Ranch Site**

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Table 1. Patterson Ranch Property Pool Attributes

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					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.

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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 ✓ yes

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: ARDENWOOD Pool #: 2

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 12 °C Air: 15 °C

Pool Depth:
at time of sampling: 17 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 10 m x 20 m
estimated maximum: _____m x _____m

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: agriculture

(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 falcons eating kill on telephone pole (12/27/0
2 loggerhead shrikes sitting on telephone wire (1/22/03)
1/10/03 12 °Cw 14 °Ca 30 cm deep cor., micro.
1/22/03 14 °Cw 16 °Ca 1 16cm deep ost., cor., copepods,
2/7/03 4 °Cw 7 °Ca 11 cm deep micro, clad, cor

(USF&WS rev. 4/96)

U.S. Fish and Wildlife Service Vernal Pool Data Sheet
Wet Season Survey

D

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: 9:00 County: ALAMEDA Quad: NEWARK

Collector(s): WENDY WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 1

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 12 °C Air: 16 °C

Pool Depth:
at time of sampling: 5 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 1 m x 2 m
estimated maximum: _____m x _____m

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: farming

(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 Falcon sitting in field

9:50 am 1/10/03 11 °C w 13°C a 14 cm deep ost.
12:49 pm (USFWS rev. 4/98) 1/22/03 14 °C w 16°C a 8 cm deep ost
8:10 am 2/7/03 4°C w 7°C a 5 cm ost., clad.

Mr. Joshua C

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: 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) _____		

Insects: (adult or larvae)

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		Accession/Catalog #		Pool #
	°C w	°C a	depth		
8:30 am 3/7/03	11°	13°	1 cm	spp. ostracods	
11:05 am 3/20/03	22°	17°	3 cm	ostracods	
11:15 am 4/4/03	18°	19°	10 cm	microturbularia	

(USF&WS rev. 4/96)

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:
(note reproductive status)

NONE

Notostracans:
(note reproductive status)

NONE

(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)		

Insects: (adult or larvae)

Anisoptera:	yes	no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	no
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	no
Other (specify)		

oucher Specimens

ecimens shall be preserved according to the standards of the institution in which they will be essioned.

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	# Individuals	Accession/Catalog #	Pool #
°Cw	°Ca	depth	
10°	13°	10cm	
dry			Spp.
dry			Cor, micro, Clad, ost.
dry			
dry			
dry			

- field disked between last survey and this.

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: 9:45 County: ALAMEDA Quad: NEWARK

Collector(s): WENDY WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 3

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 12 °C Air: 15 °C

Pool Depth:
at time of sampling: 12 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 5 m x 10 m
estimated maximum: _____m x _____m

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: agriculture

(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 12°Cw 14 °Ca 20 cm deep copepods
1/22/03 14 °Cw 14 °Ca 15cm deep ost, cope, cor., micro
2/7/03 dry
2/21/03 13°Cw 15°Ca 2cm deep micro, ost, cope

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: None
(note reproductive status)

(Optional) Species Observations:

Cladocerans:	yes	no (circled)
Conchostracans:	yes	no (circled)
Copepods:	yes	no (circled)
Ostracods	yes	no (circled)
Fish	yes	no (circled)
Frogs	yes	no (circled)
Salamanders	yes	no (circled)
Waterfowl	yes	no (circled)

Other (specify) ____________
Microturbularians

Insects: (adult or larvae)

Anisoptera:	yes	no (circled)
Zygoptera:	yes	no (circled)
Hydrophilidae:	yes	no (circled)
Dytiscidae:	yes	no (circled)
Corixidae:	yes	no (circled)
Notonectidae:	yes	no (circled)
Belostomatidae:	yes	no (circled)

Other (specify) ____________

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 dry field disked between last survey and this

4/18/03 dry

5/1/03 dry

U.S. Fish and Wildlife Service Vernal Pool Data Sheet
Wet Season Survey

P

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: 10:20 County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 4

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 14 °C Air: 16 °C

Pool Depth:
at time of sampling: 5 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 20 m x 35 m
estimated maximum: _____m x _____m

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: agriculture

(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°C w 15°C a 12 cm deep ost.
1/22/03 14 °C w 16 °C a 5 cm deep ost, cope, dyt.
2/7/03 5°C w 7°C a 5cm deep ost, cope, clad, ost., cor, dyt.
2/21/03 9°C 15°C 6 cm ost, cope, micro
3/7/03 10° 13° 3cm ost, cue.

(USF&WS rev. 4/96)

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: 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)		

Canada goose

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #
11:45am 3/20/03 °Cw 25° °Ca 17°	depth (cm) 3cm	~~spp.~~ ost., cor.	
11:45am 4/4/03 18° 16°	>1cm	ost.	

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: 10:40 County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 5

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 14 °C Air: 16 °C

Pool Depth:
at time of sampling: 4 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 2 m x 2 m
estimated maximum: _____m x _____m

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: 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: 1/10/03 13 °C w 15 °C a 14 cm deep ost.
1/22/03 14 °C w 16 °C a 10 cm deep ost.
2/7/03 dry
2/21/03 13 °C w 15 °C a 10 cm deep ost. cnl.
3/7/03 dry 3/20/03 dry

(USF&WS rev. 1/98)

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: 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)		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #

4/4/03 dry

4/18/03 dry

5/1/03 dry

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 _✓_ yes

Required color slides and/or photographs for the project site are included: ____ no ____ yes

Date: 12/27/02 Time: 11am County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 6

Township: ________ Range: ________ Section: ________ ______ lat. ______ long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 8 cm

Surface Area:
at time of sampling: 300 m x 500 m

estimated maximum: ______ cm estimated maximum: ______ m x ______ m

Habitat Condition: (circle where appropriate)

- undisturbed disturbed: tire tracks garbage (circled: discing/plowing)

- (circled: ungrazed) 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:

1/10/03 13°C w 16°C a 9 cm deep ost, Canada geese, small shorebirds

1/22/03 14°C w 16°C a 13 cm deep ost, cop. cor shorebird

down to a few shallow pools 2/7/03 6°C w 8°C a 3cm deep ost, clad, cor, dyt.

2/21/03 13°C 15°C 7 cm deep ost, cope

3/7/03 10°C 13°C 5 cm deep ost, clad, nau

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: 11am County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 10

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 8 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 300 m x 500 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 13°C w 16°C a 9 8 cm deep ost., Canada geese, small shorebirds

1/22/03 14°C w 16°C a 13 cm deep ost, cop. cor shorebird

down to a few shallow pools 2/7/03 6°C w 8°C a 30cm deep ost, dad, cor, dyt.

2/21/03 13°C 15°C 7 cm deep ost, cope

3/7/03 10°C 13°C 5 cm deep ost, dad, mal

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: 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) _____		

Insects: (adult or larvae)

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			Accession/Catalog #	Pool #
	°Cw	°Ca	depth	~~spp~~	
3/20/03	27°	17°	2cm	Clad, ost.	
4/4/03 dry					
4/18/03	26°	20°	8cm	none	
5/1/03	22°	18°	1cm	ost	
5/15/03 dry					

(USF&WS rev. 4/96)

U.S. Fish and Wildlife Service Vernal Pool Data Sheet
Wet Season Survey

D

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: 11:30 County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 7

Township: ________ Range: ________ Section: ________ ______ lat. ______ long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 23 cm

Surface Area:
at time of sampling: 50 m x 150 m

estimated maximum: ____ cm estimated maximum: ____ m x ____ m

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: 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:

1/10/03 15°C w 19°C a 20 cm deep gadwall, mallard, shoveler, [illegible], shorebirds

1/22/03 14°C w 16°C a 20 cm deep Can. geese, mallard cor., ost., clad., [illegible]

2/7/03 7°C w 11°C a 20 cm deep cor, cul, dytiscid ost. clad. dytiscid, corixid

2/21/03 14°C 17°C 20 cm deep ost, clad, cor, snow goose, white fronted geese, stilts, [illegible]

(USFWS rev 4/96)

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: 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	no	Dytiscidae:	yes	no
Frogs	yes	no	Corixidae:	yes	no
Salamanders	yes	no	Notonectidae:	yes	no
Waterfowl	(yes)	no mallard, Cinnamon	Belostomatidae:	yes	no
Other (specify)			Other (specify)		

Chironomid

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	# Individuals		Accession/Catalog #	Pool #
	°Cw	°Ca	depth (cm)	~~Spp~~
3/7/03	12°	14°	22 cm	cor, clad
3/20/03	22°	17°	22cm	clad, cor.
4/14/03	23°	15°	19 cm	cor, clad, cul.

(USF&WS rev. 4/96)

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: 12:50 County: ALAMEDA - Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 8

Township: ______ Range: ______ Section: ______ ______ lat. ______ long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 15 cm

Surface Area:
at time of sampling: 40 m x 50 m

estimated maximum: ______ cm estimated maximum: ______ m x ______ m

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: 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:

1/10/03 15°Cw 19°Ca 16 cm deep dytic., ost., cor.

1/22/03 14°Cw 16°Ca 15 cm deep ost., cope, clad, cor., noto., dyticid, corda

2/7/03 7°Cw 11°Ca 7 cm deep gnae clad, ost, cor

2/21/03 14°C 17°C 13 cm

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: 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)		

Insects: (adult or larvae)		
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		Accession/Catalog #	Pool #
	°C w	°C a	depth (cm)	
Sim 3/7/03	13°	14°	15 cm	Clad, cor, chiro., dyt.
3/20/03	25°	17°	10cm	
4/4/03	dry			ost, cor, copp., Clad
4/18/03	26°	20°	12 cm	beetle
D 5/1/03	22°	19°	16 cm	beetle, ost, Clad, Cor
5/15/03	dry			

(USF&WS rev. 4/96)

D

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: _____ County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 9

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 23 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 30 m x 100 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 15°Cw 19°Ca 30 cm deep shorebirds, cor, amphipods

1/22/03 14°Cw 16°Ca 30 cm deep cor, amphipod, ost, HYRE

2/7/03 9°Cw 11°Ca 30 cm deep cope, ost, clad, corn shorebirds

2/21/03 13°C 16°C 15 cm ost clad, cor, mole

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: 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	(no)	Dytiscidae:	yes	(no)
Frogs	(yes)	no HYRE adult	Corixidae:	(yes)	no
Salamanders	yes	(no)	Notonectidae:	yes	(no)
Waterfowl	(yes)	no mallards	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	# Individuals		Accession/Catalog #	Pool #
9:25 am 3/7/03	°Cw	°Ca	depth (cm)	spp.
	11°	14°	30cm	cor, clad, noto
3/20/03	19°	17°	30cm	clad, cor.
4/4/03	19°	15°	25cm	ost, cor, clad.

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: _____ County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 10

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 10 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 25 m x 35 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 15°C w 19°C a 15 cm deep Crayfish, dyt, cor.
1/22/03 14°C w 16°C a 12 cm deep cor, dyt, ost, osl, clad, cor.
2/7/03 9°C w 12°C a 8 cm deep
2/21/03 12°C 11.0°C 5 cm deep not dut.

(USF&WS rev. 4/96)
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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 ✓ yes

Required color slides and/or photographs for the project site are included: ____ no ____ yes

Date: 12/27/02 Time: _____ County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 10

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 10 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 25 m x 35 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 15°C w 19°C a 15cm deep Crayfish, dyf, cor.
1/22/03 14°C w 16°C a 12cm deep cor, dyf, os
2/7/03 9°C w 12°C a 8cm deep os, clad, cor
2/21/03

(USF&WS rev. 4/96)

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: 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 HYRE adult
Salamanders	yes (no)
Waterfowl	(yes) no mallard
Other (specify)	

Insects: (adult or larvae)

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		Accession/Catalog #	Pool #
	°C w	°C a	depth (cm)	~~Spp~~
3/7/03	12°	14°	13cm	clad, ost, cor
3/20/03	25°	17°	11 cm	ost, cor
4/4/03 dry				
4/16/03	25°	20°	14 cm	beetle
5/1/03	21°	17°	10 cm	ost.
5/15/03 dry				

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 ✓ yes

Required color slides and/or photographs for the project site are included: ____ no ____ yes

Date: 12/27/02 Time: 1:45 County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 11

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 8 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 20 m x 45 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 16°C w 17°C a 11 cm deep ost. cor.
1/22/03 14°C w 14°C a 9 cm deep ost., cor., beetle, crayfish
2/7/03 dry
2/21/03 20°C 16°C a 10 cm ost.
3/7/03 17° 14° 3 cm ost, clad.

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: 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 canada goose
Other (specify) _____		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #

4/4/03 dry

4/18/03 dry

5/1/03 dry

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 ✓ yes

Required color slides and/or photographs for the project site are included: ____ no ____ yes

Date: 12/27/02 Time: 1:55 County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 12

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 10 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 25 m x 100 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 16 °C w 17 °C a 15 cm deep cor., shorebirds

1/22/03 14 °C w 16 °C a 9 cm deep cor., dyt., beetle

(USF&WS rev. 4/96) 2/7/03 dry

2/21/03 1

3/7/03 22°C w 16°C a 60cm Ost, cope

17° 14° 2

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: 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 canada goose
Other (specify) _____		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #
3/20/03 dry			
4/4/03 dry			
4/18/03 dry			
5/1/03 dry			

U.S. Fish and Wildlife Service Vernal Pool Data Sheet
Wet Season Survey

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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: 2pm County: ALAMEDA Quad: NEWARK

Collector(s): W. NEBER Permit #: TE-011691-3

Site/Project Name: ARDENWOOD Pool #: B

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 20 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 110 m x 110 m
estimated maximum: _____m x _____m

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: RESERVOIR ?

(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 25 cm deep Cor., Clad., Ost.
1/22/03 14°Cw 11°Ca 24 cm deep Cor, Clad, HYRO, mallard
2/7/03 11°Cw 15°Ca 24 cm deep Cor, Clad
2/21/03 18°Cw 16°Ca 23cm Cor. Clad

(USF&WS rev. 4/96)

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: 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 HYRE adult
Salamanders	yes	(no)
Waterfowl	yes	(no)
Other (specify) _____		

Insects: (adult or larvae)

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		Accession/Catalog #	Pool #
	°Cw	°Ca	depth (cm)	spp.
1:10pm 3/20/03	21	17°	23cm	Clad, Cor
2:30pm 4/4/03	23°	15°	9 cm	Ost, Cor

(USF&WS rev. 4/96)

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 ✓ 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 #: 14

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 13 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 10 m x 150 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 15°C w 16°C a 15cm deep ost.

1/22/03 14°C w 14°C a 17 cm deep ost.

2/7/03 13°C w 15°C a 5cm deep ost, clad, copep.

2/21/03 20°C w 16°C a 15 cm ost. copep.

(USF&WS rev. 4/96)

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: 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)		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #

	°Cw	°Ca	depth(cm)	~~spp~~.
3/20/03	25°	17°	3cm	ost. cop.

4/4/03 dry
4/18/03 dry
5/1/03 dry

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 ✓ yes

Required color slides and/or photographs for the project site are included: ___ no ___ yes

Date: 12/27/02 Time: 2:25 County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 15

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 13 °C Air: 16 °C

Pool Depth:
at time of sampling: 13 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 12 m x 200 m
estimated maximum: _____m x _____m

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: 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:

1/10/03 15°Cw 16°Ca 14 cm deep ost., Canada geese, shorebirds

1/22/03 14°Cw 16°Ca 15 cm deep ost, crayfish, small fish, dytiscid, Canada geese

11am 2/7/03 13°Cw 14°Ca 11cm deep → ost., cop, cer, chiro, stickleback

2/21/03 20°Cw 16°Ca 15cm deep ost., stickleback, cer

(USF&WS rev. 4/90)

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: NONE
(note reproductive status)

(Optional) Species Observations:

Cladocerans:	yes	**no** (circled)
Conchostracans:	yes	**no** (circled)
Copepods:	**yes** (circled)	no
Ostracods	**yes** (circled)	no
Fish	yes	**no** (circled)
Frogs	yes	**no** (circled)
Salamanders	yes	**no** (circled)
Waterfowl	yes	**no** (circled)
Other (specify)		

Insects: (adult or larvae)

Anisoptera:	yes	**no** (circled)
Zygoptera:	yes	**no** (circled)
Hydrophilidae:	yes	**no** (circled)
Dytiscidae:	yes	**no** (circled)
Corixidae:	yes	**no** (circled)
Notonectidae:	yes	**no** (circled)
Belostomatidae:	yes	**no** (circled)
Other (specify)		

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

Species	# Individuals		Accession/Catalog #	Pool #
	°Cw	°Ca	depth (cm)	spp
10:30 3/7/03	16°	15°	3cm	ost, cor, ~~clad~~ cope, chickldae.
3/20/03	dry			
4/4/03	dry			
4/18/03	dry			
5/1/03	dry			

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 ✓ 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): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 16

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 12 °C Air: 14 °C

Pool Depth:
at time of sampling: 10 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 12 m x 15 m
estimated maximum: _____m x _____m

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: farming

(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°C w 16°C a 9 cm deep o*. 1 cope, micro, dyst.
2/7/03 dry.
2/21/03 dry
3/7/03 dry
3/20/03 dry

(USF&WS rev. 4/98)

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: 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	no	Dytiscidae:	yes	no
Frogs	yes	no	Corixidae:	yes	no
Salamanders	yes	no	Notonectidae:	yes	no
Waterfowl	yes	no	Belostomatidae:	yes	no
Other (specify) microturbellarians			Other (specify) _____		

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 dry - field dashed between last survey and this.
4/18/03 dry
5/1/03 dry

(USF&WS rev. 4/96)

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 ✓ 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): W WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 17

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 15 °C Air: 19 °C

Pool Depth:
at time of sampling: 12 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 3 m x 8 m
estimated maximum: _____m x _____m

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: 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:
4 ppm 1/22/03 14 °C w 16 °C a 6 cm deep
10:31 2/7/03 dry
12:40 2/21/03 dry
10 am 3/7/03 dry
12:25 pm 3/20/03 dry

(USF&WS rev. 4/96)

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 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)		

Insects: (adult or larvae)

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		Accession/Catalog #	Pool #
4/4/03	Cw 25°	Ca 15°	Om dup 0	Spp
4/18/03	dry			none
5/1/03	24°	19°		
5/15/03	dry		6 Om	none

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 ✓ 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): W WEBBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 18

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 15 °C Air: 16 °C

Pool Depth:
at time of sampling: 9 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 5 m x 8 m
estimated maximum: _____m x _____m

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: 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 °C w 14 °C a 4 cm deep ant.
2/7/03 dry 3/20/03 dry
2/21/03 dry
3/7/03 dry

(USF&WS rev. 4/96)

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: 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) _____		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #
4/4/03 dry			
4/18/03 dry			
5/1/03 dry			

(USFWS rev. 4/98)

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 _✓_ 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): W. WEBER Permit #: TE-016541-3

Site/Project Name: ARDENWOOD Pool #: 19

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 15 °C Air: 17 °C

Pool Depth:
at time of sampling: 8 cm
estimated maximum: _____cm

Surface Area:
at time of sampling: 15 m x 20 m
estimated maximum: _____m x _____m

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: 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:
NONE
1/22/03 14 °Cw 14 °Ca 3 cm deep at.
2/7/03 dry
2/21/03 dry
3/7/03 dry

bent

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:
(note reproductive status)

Notostracans:
(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) _____		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #

4/4/03 dry

4/18/03 dry

5/1/03 dry

U.S. Fish and Wildlife Service Vernal Pool Data Sheet
Wet Season Survey

D

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: 2/1/03 Time: _____ County: ALAMEDA Quad: NEWARK

Collector(s): W. WEBER Permit #: TE-016591-3

Site/Project Name: ARDENWOOD Pool #: 10

Township: _____ Range: _____ Section: _____ _____lat._____long.

Temperature: Water: 15 °C Air: 16 °C

Pool Depth:
at time of sampling: 13 cm
estimated maximum: _____ cm

Surface Area:
at time of sampling: 10 m x 20 m
estimated maximum: _____ m x _____ m

Habitat Condition: (circle where appropriate)

- undisturbed — disturbed: tire tracks garbage (discing/plowing)
- (ungrazed) — grazed: cattle (light) horses (moderate) sheep (heavy) other_____
- 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°C w 16°C a 15 cm deep conxid
11:37am 2/7/03 12°C w 15°C a 10 cm deep clad, ost, cor
1430pm 2/21/03 20°C 16°C a 13 cm clad, ost, cor
11:03 3/7/03 17° 15° 11 cm cor, ost, clad, beetle

(USF&WS rev. 4/96)

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: 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)		

Insects: (adult or larvae)

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	Accession/Catalog #	Pool #
3/20/03	°Co 25° °Ca 17°	depth (cm) 13	Spp. ost, clad, cor, beetle
4/4/03	25° 15°	11	ost, clad, cor
4/18/03	28° 20°	9	cor beetle

PATTERSON RANCH
BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

H. T. HARVEY & ASSOCIATES
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PATTERSON RANCH
BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

Prepared by:

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San Mateo, CA 94401

December 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.

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H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

Patterson Ranch: Site / Vicinity Map

File No. 657-08	Date 3/31/04	Figure 1

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

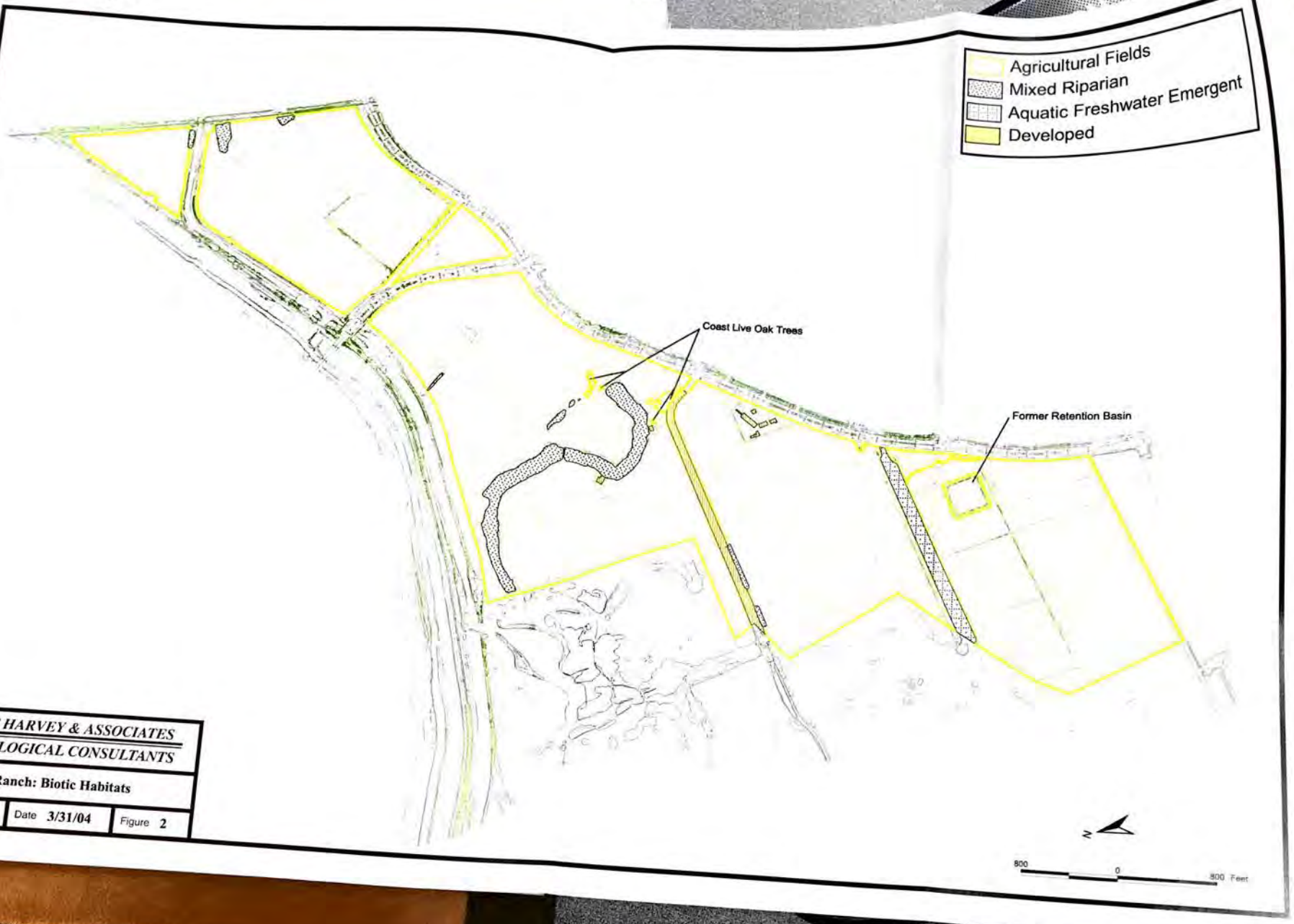
Agricultural fields habitat occupies the vast majority of the study area (Figure 2). These fields and surrounding agricultural access roads comprise recently disked areas characterized by bare, disturbed soils that currently support little vegetation. Agricultural fields on the property are managed to 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.


Agricultural Fields
Mixed Riparian
Aquatic Freshwater Emergent
Developed
Coast Live Oak Trees
Former Retention Basin
N
800
0
800 Feet
H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS
Patterson Ranch: Biotic Habitats
File No. 657-08
Date 3/31/04
Figure 2



H.T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

Patterson Ranch: Biotic Habitats

File No. 657-08	Date 3/31/04	Figure 2

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 fern (*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's-beak (*Cordylanthus maritimus* ssp. *palustris*), Diablo helianthella (*Helianthella castanea*), big-scale 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 jewel-flower (*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.

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
Federal or State Endangered Species			
Contra Costa goldfields (*Lasthenia conjugens*)	FE, CNPS 1B	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*)	FE	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 draytonii*)	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			
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			
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 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 area.	Observed foraging immediately adjacent to the site, and expected to forage on the site. No breeding habitat on or near the site.

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.
California 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.

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
State Protected Species or CNPS Species			
Alkali milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grassland.	Potential habitat exists on site. Species determined to be absent.
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**

FE = Federally listed Endangered
FT = Federally listed Threatened
ST = State listed Threatened
FPE = Federally proposed Endangered
FC = Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened
CSSC = California Species of Special Concern
SP = State Protected Species
CNPS 1A = Plants presumed extinct in California
CNPS 1B = Plants rare, threatened, or endangered in California and elsewhere

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 on-going 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 on-going 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 Burrowing Owls, 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 red-legged frog 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.

Surveys for Burrowing Owls 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 California tiger salamander 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. Surveys for this species conducted during 2002-03 proved negative (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,

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.

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

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Ranch: Special Status Wildlife Species: Observed and Potential Habitat

7-08 | Date **3/31/04** | Figure **3**

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PATTERSON RANCH
BIOLOGICAL OPPORTUNITIES AND CONSTRAINTS ANALYSIS

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December 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.

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Patterson Ranch: Site / Vicinity Map

File No. 657-08	Date 3/31/04	Figure 1

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

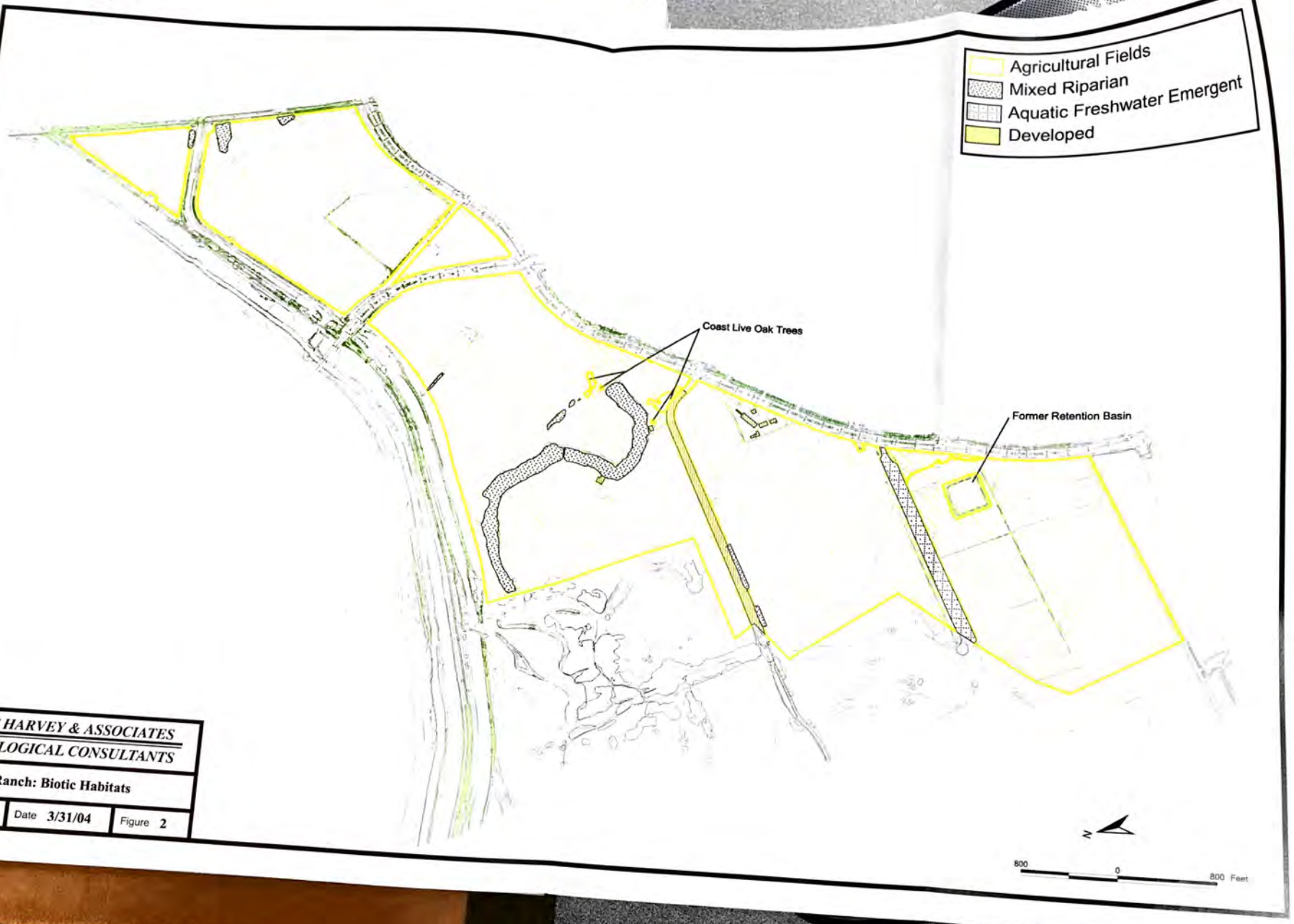
Agricultural fields habitat occupies the vast majority of the study area (Figure 2). These fields and surrounding agricultural access roads comprise recently disked areas characterized by bare, disturbed soils that currently support little vegetation. Agricultural fields on the property are managed to 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.


Agricultural Fields
Mixed Riparian
Aquatic Freshwater Emergent
Developed
Coast Live Oak Trees
Former Retention Basin
N
800
0
800 Feet
H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS
Patterson Ranch: Biotic Habitats
File No. 657-08
Date 3/31/04
Figure 2



H.T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

Patterson Ranch: Biotic Habitats

File No. 657-08	Date 3/31/04	Figure 2

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 fern (*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's-beak (*Cordylanthus maritimus* ssp. *palustris*), Diablo helianthella (*Helianthella castanea*), big-scale 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 jewel-flower (*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.

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
Federal or State Endangered Species			
Contra Costa goldfields (*Lasthenia conjugens*)	FE, CNPS 1B	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*)	FE	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			
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			
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 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 area.	Observed foraging immediately adjacent to the site, and expected to forage on the site. No breeding habitat on or near the site.

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.
California 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.

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
State Protected Species or CNPS Species			
Alkali milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Alkaline soils in playas, vernal pools, and adobe clay areas in valley and foothill grassland.	Potential habitat exists on site. Species determined to be absent.
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**

FE = Federally listed Endangered
FT = Federally listed Threatened
ST = State listed Threatened
FPE = Federally proposed Endangered
FC = Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened
CSSC = California Species of Special Concern
SP = State Protected Species
CNPS 1A = Plants presumed extinct in California
CNPS 1B = Plants rare, threatened, or endangered in California and elsewhere

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 on-going 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 on-going 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 Burrowing Owls, 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 red-legged frog 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.

Surveys for Burrowing Owls 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 California tiger salamander 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. Surveys for this species conducted during 2002-03 proved negative (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,

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.

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

H.T. HARVEY & ASSOCIATES
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Ranch: Special Status Wildlife Species: Observed and Potential Habitat

7-08 | Date **3/31/04** | Figure **3**

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, highway 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 farm-road bridge is likely to be removed if the site is developed. The third was inside a box culvert 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 nesting 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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APPENDIX B.

CALIFORNIA TIGER SALAMANDER
2002/2003 REPORT

ARDENWOOD FOREST
CALIFORNIA TIGER SALAMANDER
2002/2003 REPORT

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Project 657-08

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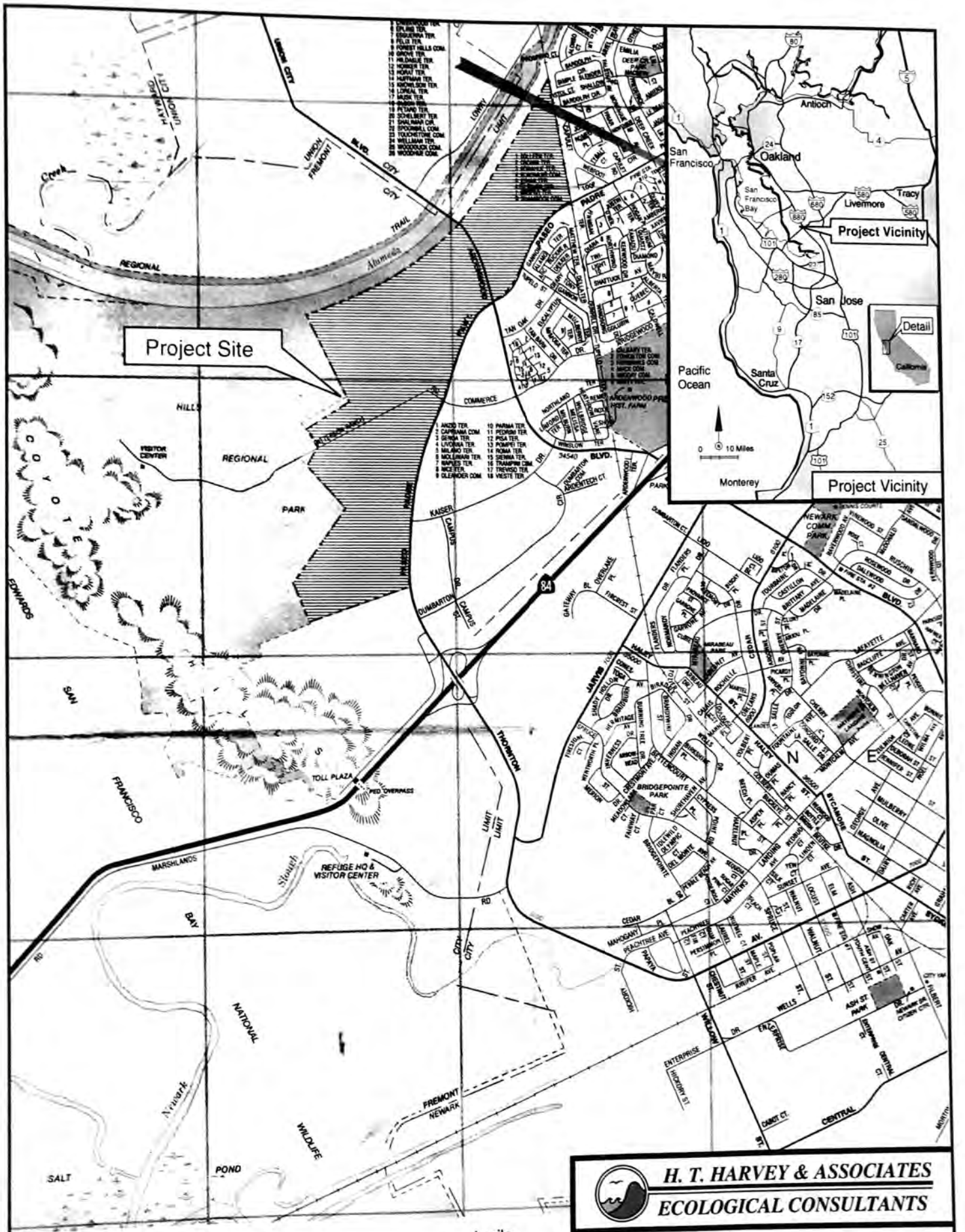
FIGURES:

INTRODUCTION

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.



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Ardenwood 2000: Site / Vicinity map

File No. 657-06	Date 12/4/01	Figure 1

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. Hand-held 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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Western Burrowing Owl Survey Report
Patterson Ranch Specific Project Site

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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 accounted 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.

TABLE 1 - SURVEY SCHEDULE

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

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).

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[1] 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.

Figure 2: Burrow Concentration Areas

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.

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SOIL ANALYSIS
FOR EVIDENCE OF
FEDERALLY LISTED LARGE BRANCHIOPODS
AT THE
PATTERSON PROJECT, CALIFORNIA

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February 2004

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.

Table 1. Results of Soil Analysis

Basin No.	Insect parts	Micro-Turbularian Cysts	Ostracod	Cladoceran Ephippia
1			X	X
2				X
3	X			
4				
5	X	X		
6			X	
7	X		X	X
8				
9				X
10		X		
11	X			X
12	X			
13	X		X	X
14				
15			X	X
16	X	X		X
17				
18	X			
19	X			
20	X		X	

LITERATURE CITED

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Mura, G. 1991. SEM morphology of resting eggs in the species of the genus *Branchinecta* from North America. J. Crust. Biol. 11: 432-436.

H.T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS

MEMORANDUM

PROJECT# 657-06

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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.

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PACIFIC BIOLOGY
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CALIFORNIA RED-LEGGED FROG SITE ASSESSMENT AND SURVEY REPORT

PATTERSON RANCH PROJECT FREMONT, ALAMEDA COUNTY, CA

PREPARED FOR:

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September 21, 2007

TABLE OF CONTENTS

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
- 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**.

TABLE 1
SURVEY SCHEDULE

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

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.

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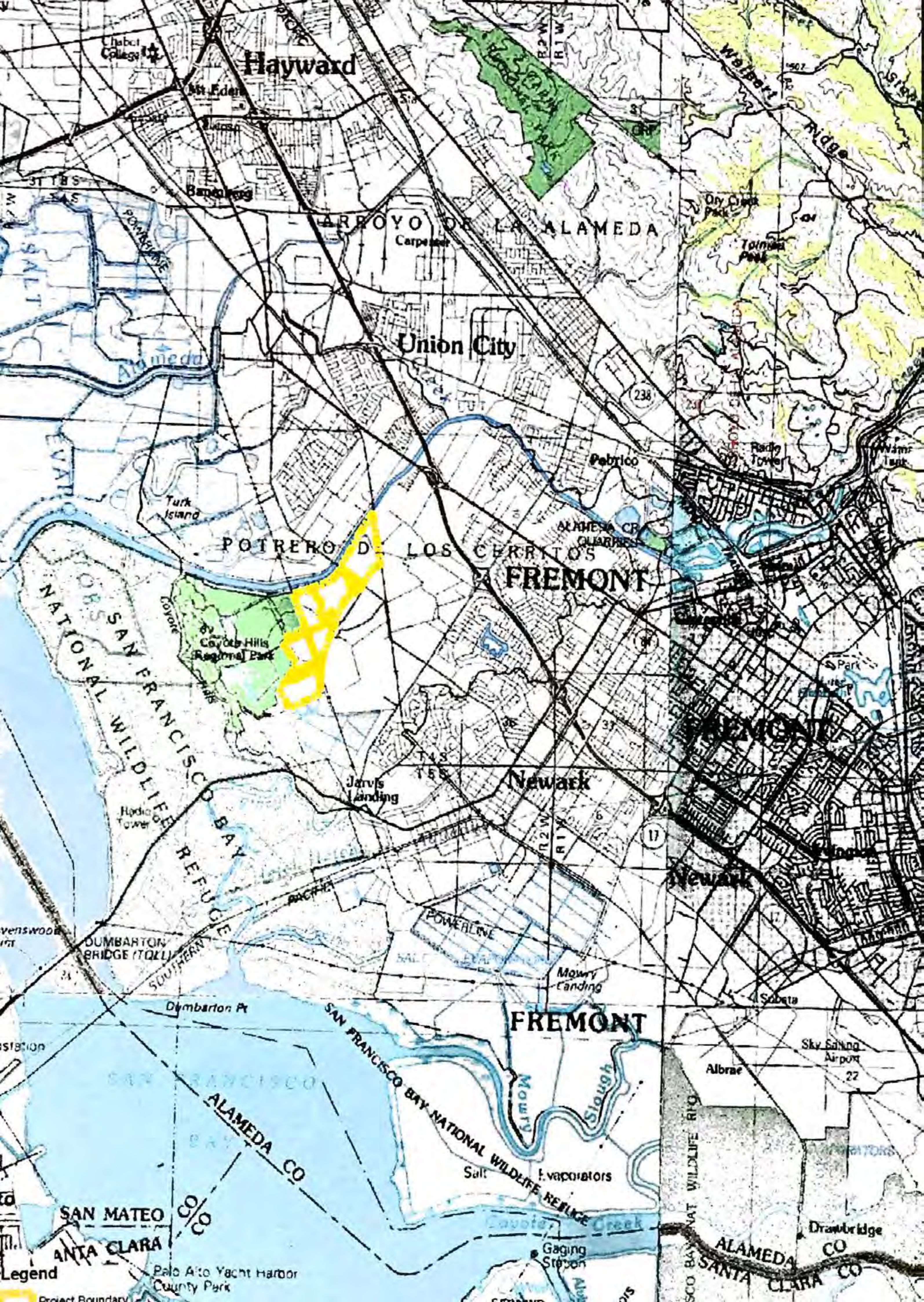
[1] June 13, 2007. Personal communication with Joe Didonato, Wildlife Supervisor, East Bay Regional Park District.



Hayward
Chabot College
Mt Eden
ARROYO DE LA ALAMEDA
Carpenter
Union City
Alameda
Turk Island
POTRERO DE LOS CERRITOS
FREMONT
Coyote Hills Regional Park
SAN FRANCISCO BAY NATIONAL WILDLIFE REFUGE
Jarvis Landing
Newark
Dry Creek Park
Walpert Ridge
Radio Tower
238
17
84
DUMBARTON BRIDGE (TOLL)
Dumbarton Pt
SOUTHERN PACIFIC
POWERLINE
Mowry Landing
Mowry Slough
Salt Evaporators
Coyote Creek
Drawbridge
Gaging Station
Sky Sailing Airport
Albrae
ALAMEDA CO
SAN MATEO CO
SANTA CLARA CO
Palo Alto Yacht Harbor County Park
Legend
Project Boundary

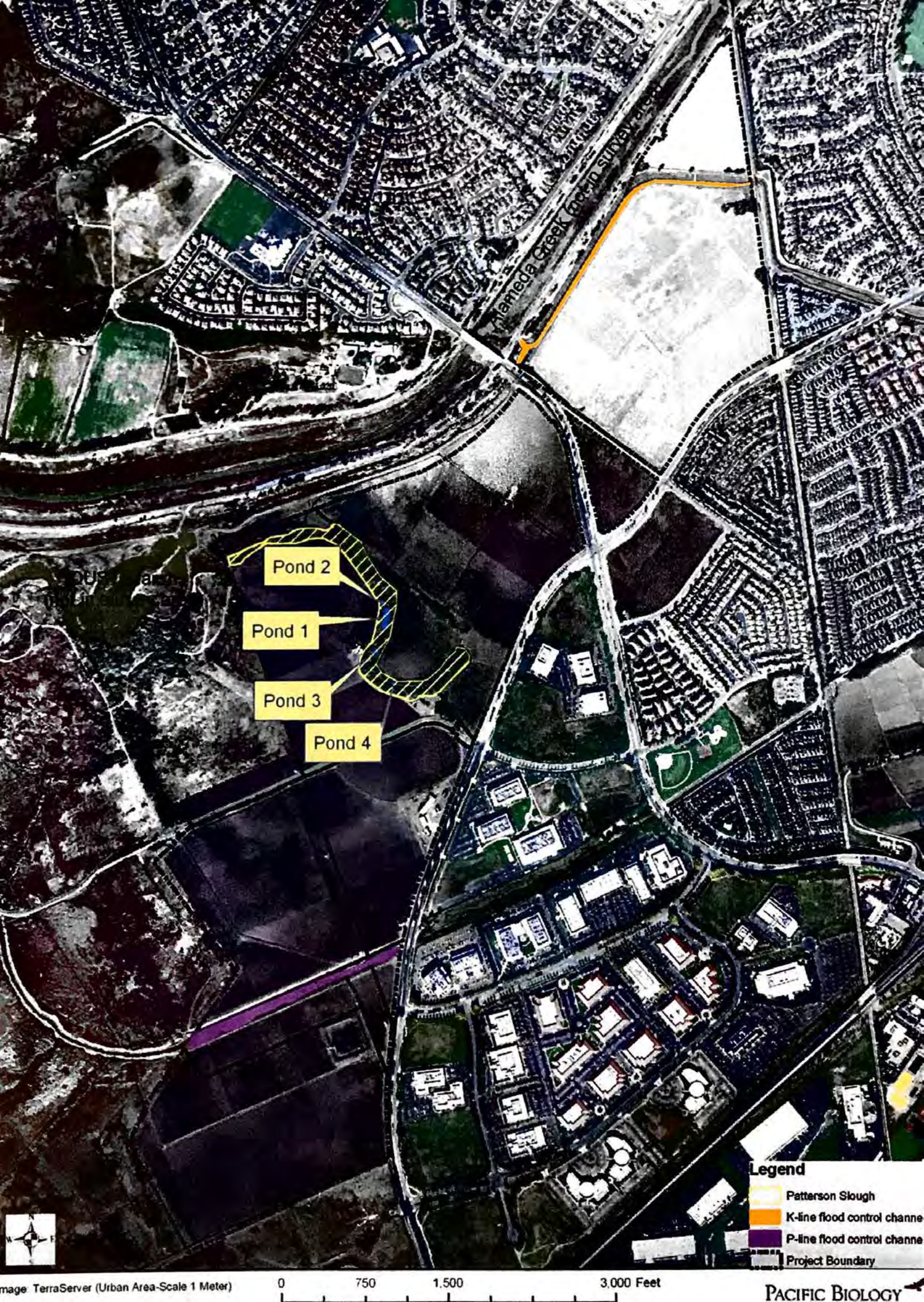

Alameda Creek (not in survey area)
Pond 2
Pond 1
Pond 3
Pond 4
Legend
Patterson Slough
K-line flood control channe
P-line flood control channe
Project Boundary
mage: TerraServer (Urban Area-Scale 1 Meter)
0
750
1,500
3,000 Feet
PACIFIC BIOLOGY

Figure 3: Closest Documented CRLF Occurrrences

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.

7.0 REFERENCES

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Jennings, M. 1998. Personal Communication as referenced in the *Recovery Plan for the California Red-Legged Frog* (USFWS 2002). Biological Resources Division, U.S. Geological Survey, Piedras Blancas Field Station of the Western Ecological Research Center, San Simeon, California.

MacKay &Somps. 1999. *Patterson Ranch Drainage Report.*

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Stebbins, R.C. 1985. A *Field Guide to Western Reptiles and Amphibians*. Second edition, revised. Houghton Mifflin Company, Boston, MS.

U.S. Fish and Wildlife Service. 2002. *Recovery Plan for the California Red-Legged Frog* (*Rana aurora draytonii*).

U.S. Fish and Wildlife Service. 2005. Guidance *on Site Assessments and Field Surveys for the California Red-legged Frog.*

Photo 2: Patterson Slough-Pond 1; southeast facing

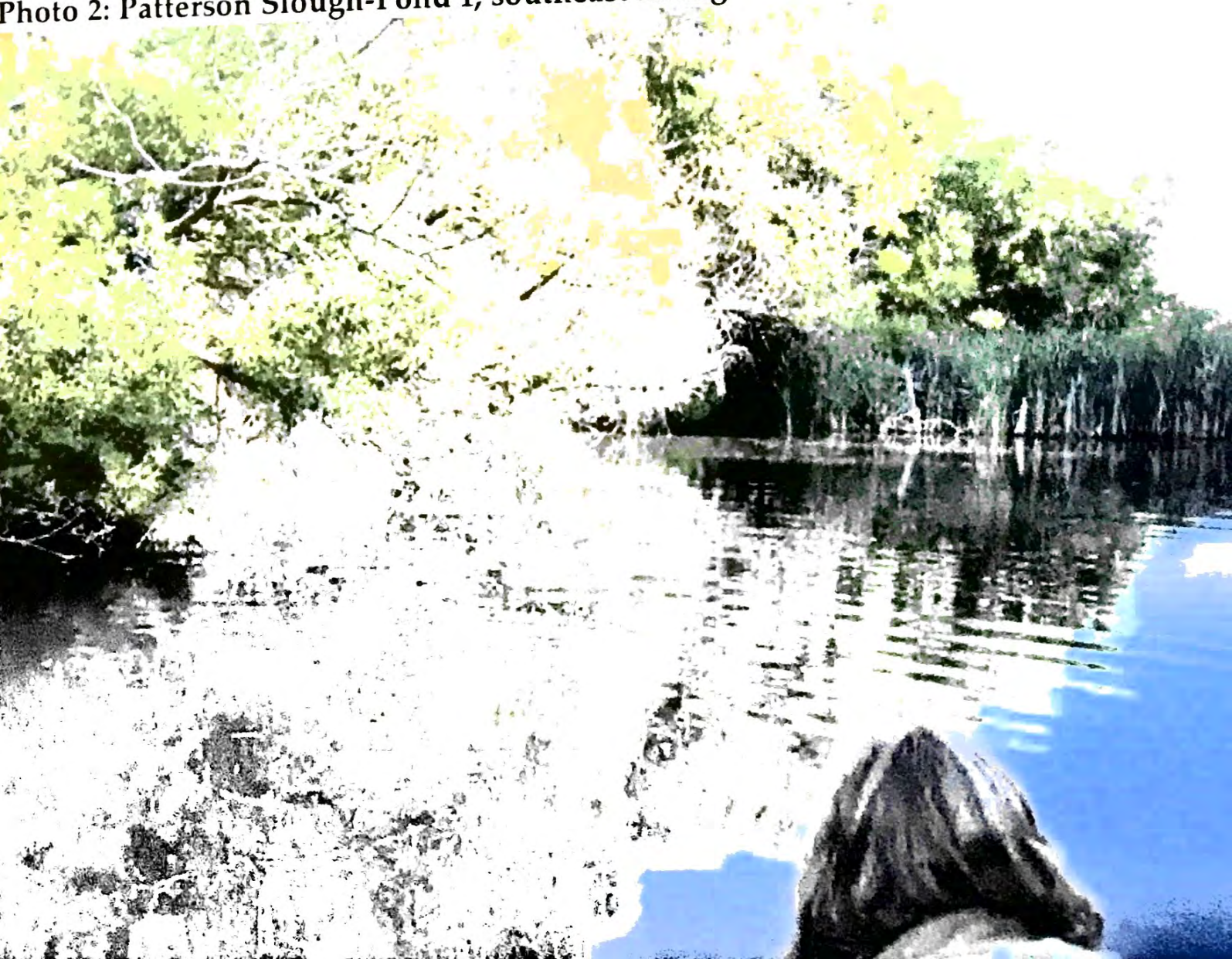


Photo 3: Patterson Slough-Pond 1; cattails bisecting pond

Photo 4: Patterson Slough-Pond 2; north facing, pond covered by aquatic veg.

Photo 5: Patterson Slough-Pond 3, southeast facing

Photo 6: Patterson Slough-Pond 3; southwest facing

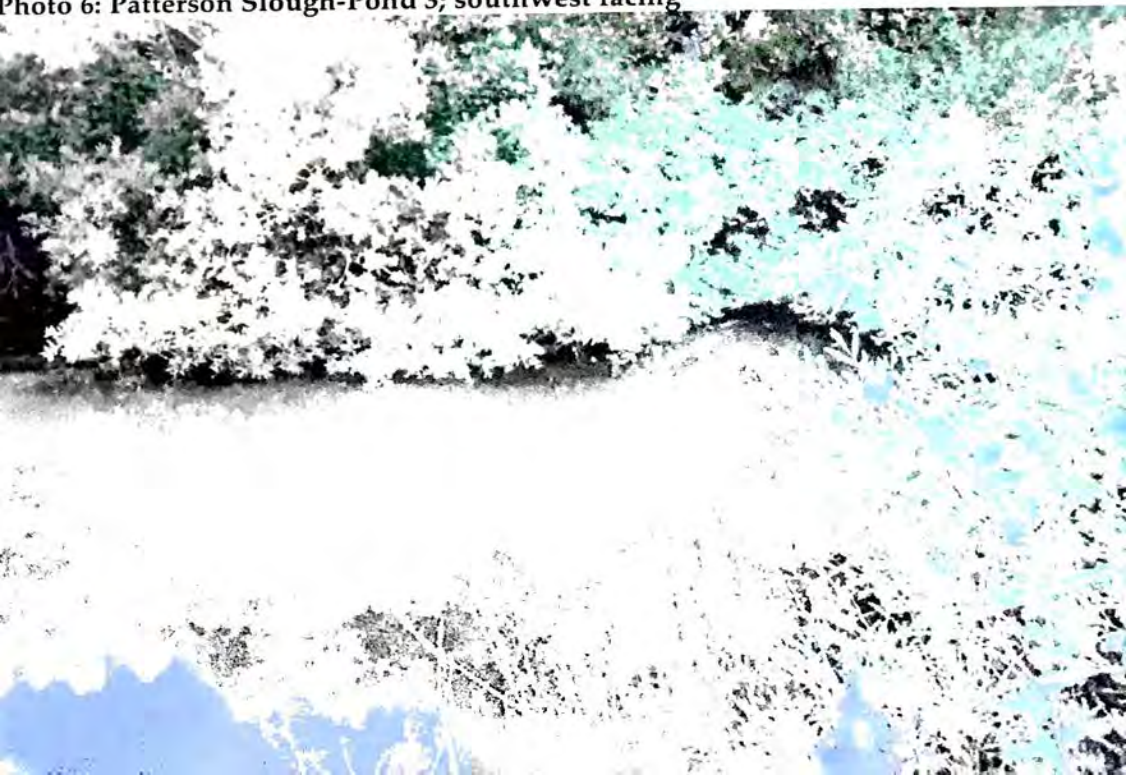


Photo 7: Patterson Slough; [illegible]

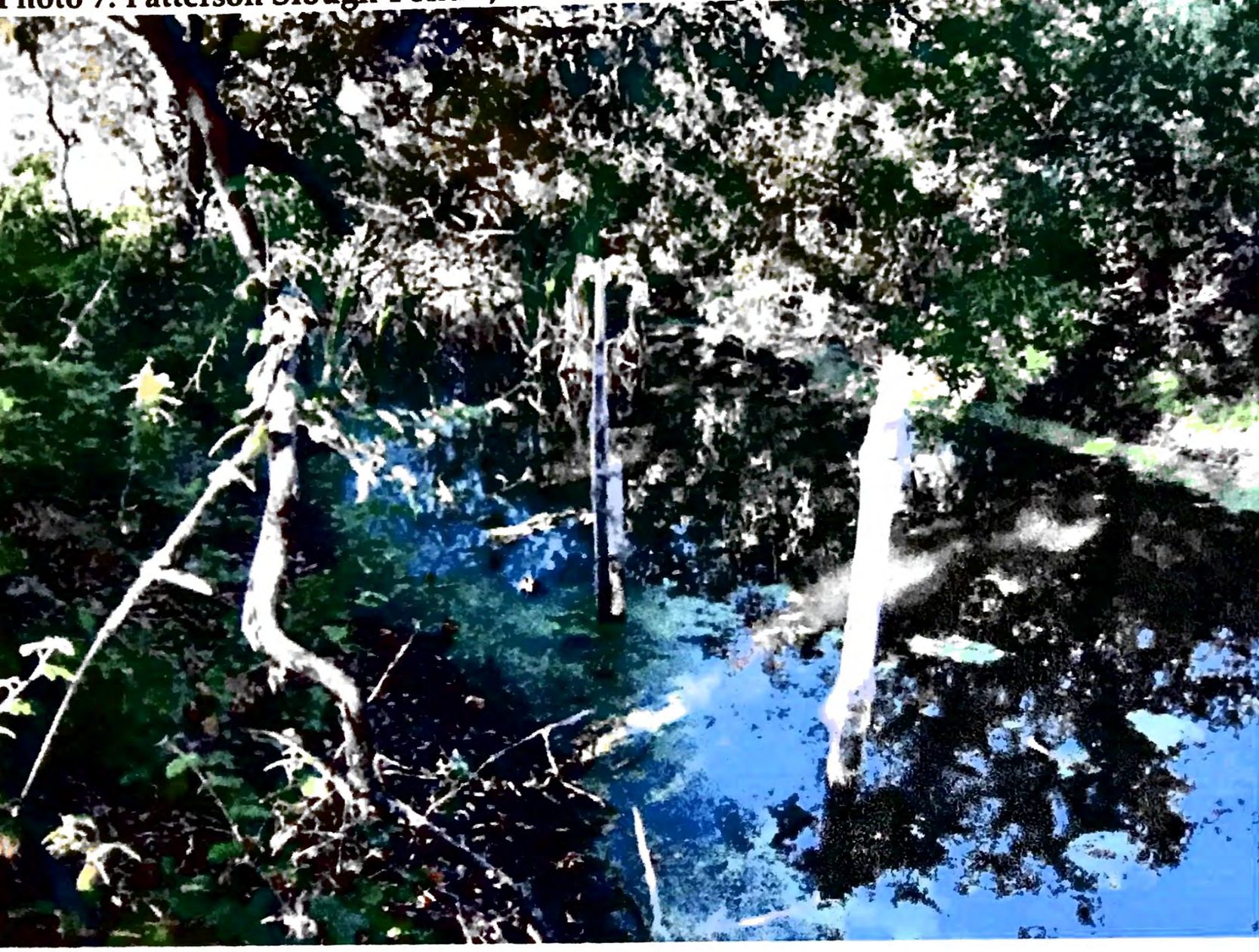
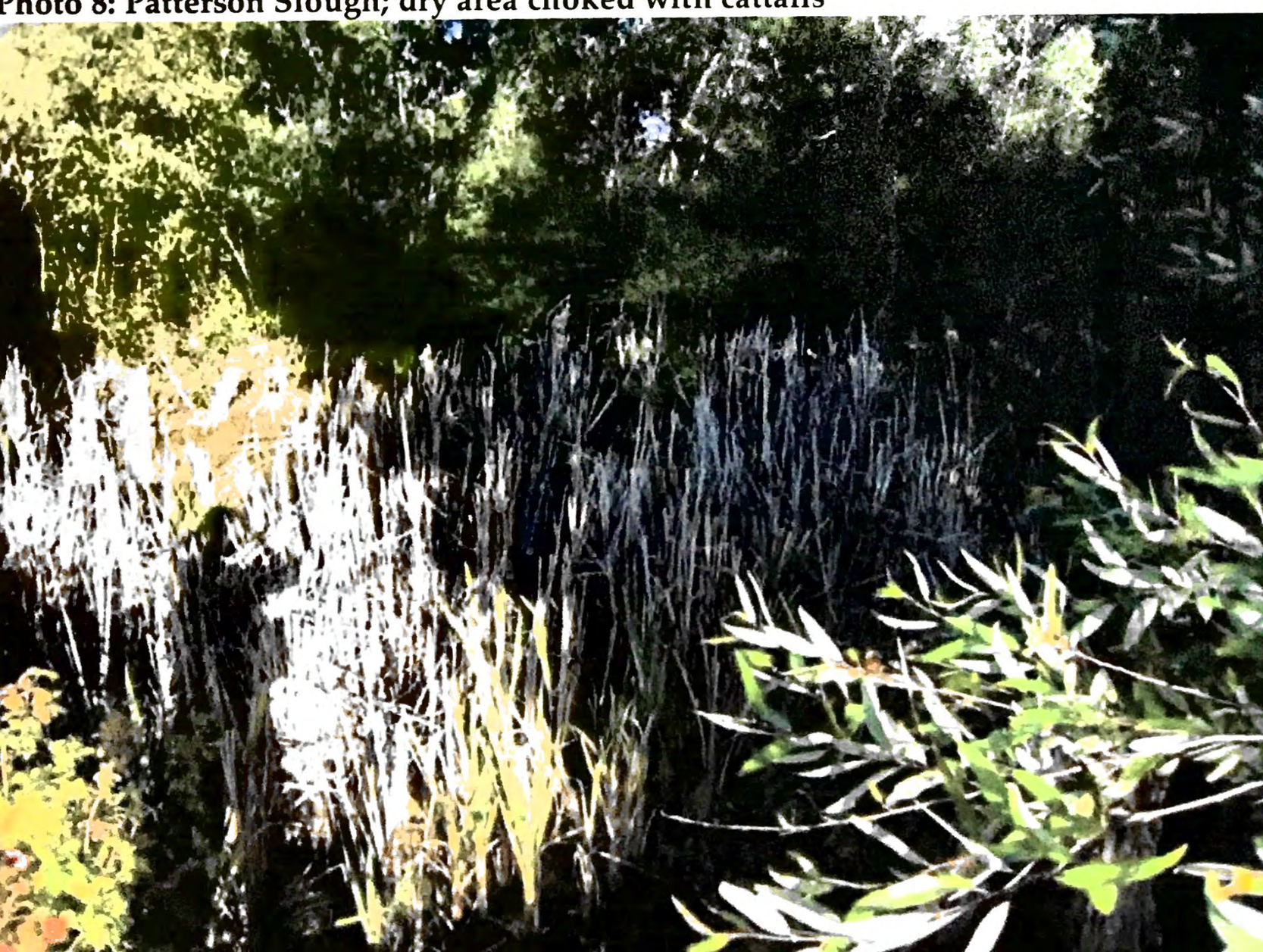


Photo 8: Patterson Slough; dry area choked with cattails



channel; view east

Photo 10: K-line channel; view west

Photo 11: P-line channel; view west, eastern portion of channel

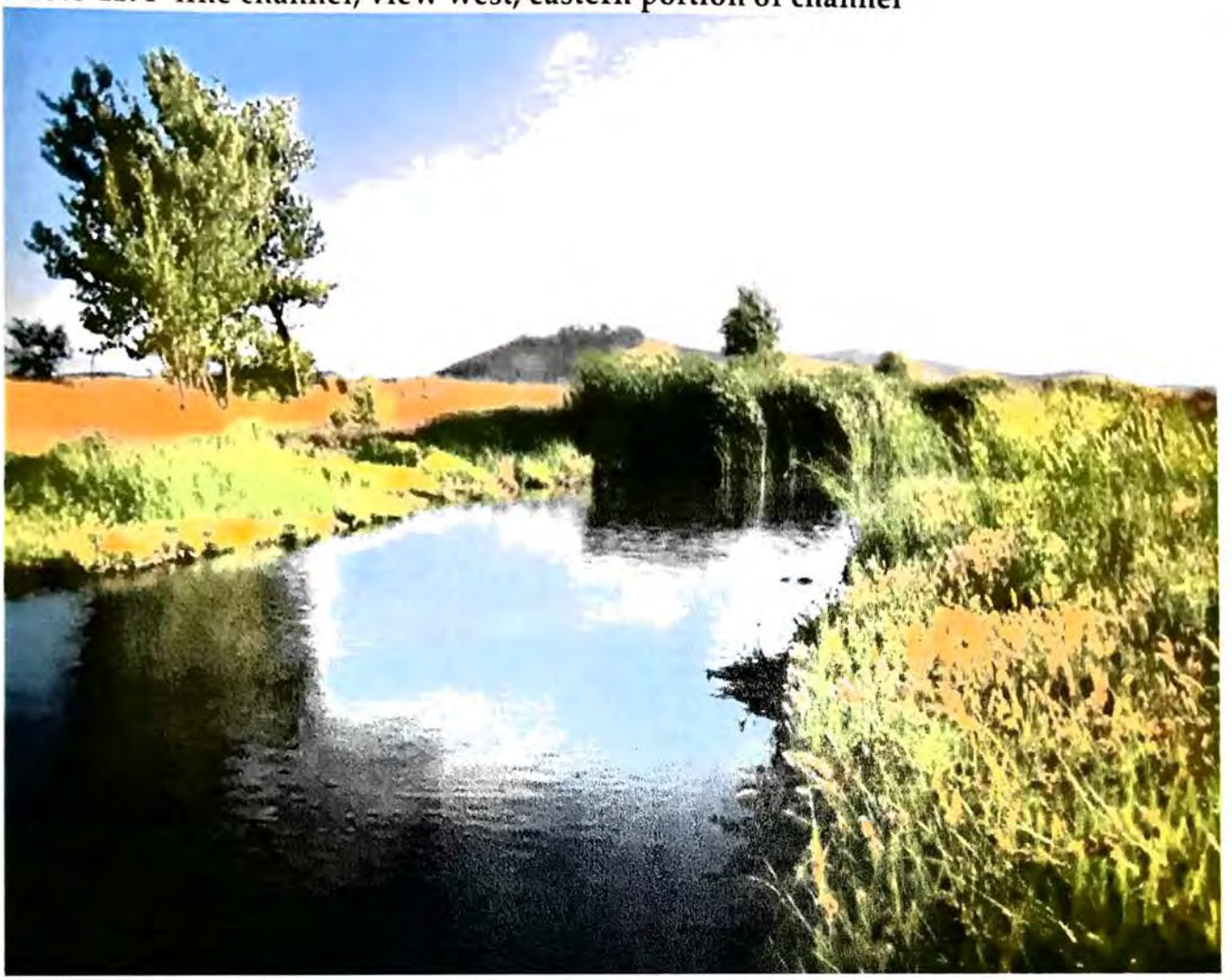


Photo 12: P-line channel; view west, western portion of channel

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July 28, 2016

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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.

Appendix 1

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

This document is the Draft 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.
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SUMMARY OF IMPACTS AND MITIGATION MEASURES

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
AESTHETICS					
The Project would not result in significant Project or cumulative impacts related to Aesthetics; therefore, no mitigation measures are required.					
AIR QUALITY					
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:	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. 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.	Plan for equipment emissions (Table 8.3 Item #10)	Construction Contractor	Prior to construction	EBRPD Construction Manager	Prior to and during project construction

Mitigation Measures	Action/Product	Implemented By	Implementation Timing	Monitored By	Monitoring Frequency
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. 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 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. 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					
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.	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 protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers.	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
	Inspection of wildlife exclusion fences and repair as needed	Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
• 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,	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.	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
• 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.	Remediation of project-related erosion	Construction Contractor	Immediately upon discovery	EBRPD Stewardship Manager	During construction
	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
	Daily Monitoring report by biologist	Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
• 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.	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

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 completed, the exclusion fencing shall be removed within 72 hours.	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.
• 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.	Consultation with resource agencies, movement of pipe	Qualified Biologist	As needed during construction	EBRPD Stewardship Manager	As needed during construction
	Inspection of contractor equipment for leaks and repair as needed	Construction Contractor	Daily during construction	EBRPD Stewardship Manager	Daily during construction
• 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.	Notify Qualified Biologist of hazardous spills, cleanup of spills	Construction Contractor	As needed during construction	EBRPD Stewardship Manager	As needed during construction
• 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.	Return of temporarily disturbed areas to pre-project conditions	Construction Contractor	Upon completion of construction	EBRPD Stewardship Manager	Upon completion of construction
• 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 Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and 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 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	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
	Restoration of temporarily disturbed areas	Construction Contractor	After temporary disturbance	EBRPD Stewardship Manager	After temporary disturbance
	Reporting for HHMP	Qualified Biologist	Annually for the first five years and every other year for years six through ten. If all performance	EBRPD Stewardship Manager	Annually for the first five years and every other 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 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..			standards have been met at year seven, the monitoring and reporting can be concluded.		standards have been met at year seven, the monitoring and reporting can be concluded.
• 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: o 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. o Disturbed or impacted areas containing rare or Special Status plants that cannot be avoided shall be compensated at a 3:1 ratio. o 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: o 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

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.
  - 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. • Remedial Measures and Contingencies: 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.					
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	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
	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
	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					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					

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.					

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. • 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.	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
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	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: • 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.	Check equipment and materials stockpiles for Special Status wildlife	Qualified Biologist	Daily during construction	EBRPD Stewardship Manager	Daily during construction
<u>Mitigation Measure BIO-1f, Species-Specific: Conservation Measures to 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 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.	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
	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.					
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.	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
	Creation of new habitat if needed	See Mitigation Measure BIO-1b	See Mitigation Measure BIO-1b	EBRPD Stewardship Manager	See Mitigation Measure BIO-1b
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.					
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	Survey	Qualified Biologist	Prior to tree and structure removal	EBRPD Stewardship Manager	Prior to tree and structure removal
	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
	Monitoring tree and structure removal	Qualified Biologist	During tree and structure removal	EBRPD Stewardship Manager	During tree and structure removal
	Procedures for removal of trees and structures	Construction Contractor	During tree and structure removal	EBRPD Stewardship Manager	During tree and structure removal
	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

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.					
<u>Mitigation Measure BIO-2a, Project-wide: Minimize Disturbance to 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	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 :).					
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 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.	Confirm wetland delineation	Qualified Biologist, USACE, CDFW	Prior to construction	EBRPD Stewardship Manager	Prior to construction
	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.	Restore wetlands if needed	See Mitigation Measure BIO-1b	See Mitigation Measure BIO-1b	EBRPD Stewardship Manager	See Mitigation Measure BIO-1b
CULTURAL AND TRIBAL CULTURAL RESOURCES					
Mitigation Measure CUL – 1a: 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 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).				Manager	
	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
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.	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
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.	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
Mitigation Measure CUL-3b: 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
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.	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
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.	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					
Mitigation Measure 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.	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
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.	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
	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

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. 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.	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
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					
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.	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 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.	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
	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 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	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
	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.					
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.	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
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	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					
Mitigation Measure HYDRO-1: Erosion and Sediment Control: 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 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	Implement Soil Erosion Control and Revegetation Plan	Construction Contractor	During construction	EBRPD Construction Manager	During construction
	Cover and re-seed disturbed areas	Construction Contractor	Within one month of ground disturbance in each project component constructed	EBRPD Construction Manager	Within one month of ground disturbance in each project component constructed

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 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.	Prepare SWPPP and SCCP	Qualified Stormwater Developer	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to issuance of grading permit
	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, 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.	Prepare refueling/maintenance and construction staging area	Construction Contractor	Prior to issuance of grading permit	EBRPD Construction Manager	Prior to construction
	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		
Mitigation Measure HYDRO-4: Well: 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.	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
	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
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.	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					
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	Implement BMPs for construction noise	Construction Contractor	During construction	EBRPD Construction Manager	During construction

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					
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.	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
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	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 TRANSP-1.	See Mitigation Measure TRANSP-1	See Mitigation Measure TRANSP-1	See Mitigation Measure TRANSP-1	See Mitigation Measure TRANSP-1	See Mitigation Measure TRANSP-1
Mitigation Measure TRANSP-4: Implement Mitigation Measure TRANSP-2.	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2
Mitigation Measure TRANSP-5: Implement Mitigation Measure TRANSP-2.	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2	See Mitigation Measure TRANSP-2
TRIBAL CULTURAL RESOURCES					
See Cultural and Tribal Cultural Resources, above.					
UTILITIES AND SERVICE SYSTEMS					
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.	Solid waste recovery plan	EBRPD Construction Manager	Prior to beginning of construction	EBRPD Stewardship Manager	Prior to beginning of construction