



Sanitary Sewer Management Plan November 2020

**WDIDS Covered:
Anthony Chabot 2SSO11410
Coyote Hills 2SSO11481
Del Valle 2SSO11413
Garin 2SSO11411**

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Definitions, Acronyms, and Abbreviations

Asbestos Cement Pipe (ACP)

Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Calendar Year (CY)

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements to EBRPD's sanitary sewer system.

Cast Iron Pipe (CI)

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

Clean Water Act (CWA)

California Water Environment Association (CWEA)

Closed Circuit Television (CCTV)

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to the computerized maintenance management system (FAMIS) that is used by EBRPD to plan, dispatch, and record the work in its sanitary sewer system at the four enrolled parks.

District see also EBRPD

Refers to the East Bay Regional Park District.

District Code (DC)

Ductile Iron Pipe (DIP)

Division of Water Quality (DWQ)

Refers to the State of California Division of Water Quality of the State Water Resources Control Board.

East Bay Regional Park District (EBRPD)

Environmental Protection Agency (EPA)

Fats, Oils, and Grease (FOG)

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

First Responder

Refers to the Park staff that are EBRPD's initial response to an SSO event or another sewer system emergency.

Fiscal Year (FY)

Means a 12-month periods beginning July 1st and ending June 30th.

General Waste Discharge Requirements (GWDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/2006.

Geographical Information System (GIS)

Refers to EBRPD's system that it uses to capture, store, analyze, and manage geospatial data associated with EBRPD's sanitary sewer system assets.

Global Positioning System (GPS)

Refers to a field device it that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Removal Device (GRD)

Refers to grease traps and grease interceptors that are installed to remove FROG from the wastewater flow at food service establishments.

Infiltration/Inflow (I/I)

Refers to water that enters the sanitary sewer system from storm water and groundwater.

- Infiltration enters through defects in the sanitary sewer system after flowing through the soil.
- Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g., storm drains, area drains, and roof leaders).

Lateral

See Public Sewer Lateral

Legally Responsible Official (LRO)

Person(s) formally designated by EBRPD to be responsible for formal reporting and certifying of all reports submitted to the CIWQS.

Lift Station (LS)

A facility that lifts sewage into EBRPD gravity sanitary sewer collection system.

Manhole (MH)

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Mainline Sewer

Refers to EBRPD publicly owned wastewater collection system piping that is not a private lateral connection to a user.

MAST

Refers to Maintenance and Skilled Trades personnel within EBRPD

Monitoring, Measurement, and Plan Modifications (MMPM), SSMP Element IX

Monitoring and Reporting Program (MRP)

State Water Resources Control Board WQ 2013-0058-EXEC effective September 9, 2013.

National Association of Sewer Service Companies (NASSCO)

Notification of a Sanitary Sewer Overflow (SSO)

Refers to the time at which EBRPD becomes aware of an SSO event through observation or notification by the public or other source.

Nuisance

California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all the following requirements:

- a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- c. Occurs during, or as a result of, the treatment or disposal of wastes.

Office of Emergency Services (OES or Cal OES)

Refers to the California State Office of Emergency Services.

Operations and Maintenance (O&M)

Overflow Emergency Response Plan (OERP)

Pipeline Assessment and Certification Program (PACP)

Refers to the NASSCO certification program that is used for the evaluation and condition assessment of sewer lines and appurtenances from closed circuit televising of the lines and appurtenances.

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g., cleaning, CCTV, repair, etc.).

Public Sewer Lateral (PSL)

The sewer pipeline from the plumbing of a building to a EBRPD collection line, including portions that extend across public rights-of-way and the saddle, wye, or other physical connection to the collection line. public sewer laterals are all owned and maintained by EBRPD.

Property Damage Overflow

Refers to a sewer overflow or backup that damages a private property owner’s premises.

Public Owned Treatment Works (POTW)

Regional Water Quality Control Board (RWQCB)

Refers to the San Francisco Bay Regional Water Quality Control Board.

Sanitary Sewer Backup (Backup)

A wastewater backup into a building and/or on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer Overflows (SSO)

Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- a. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- b. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- c. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a private sewer lateral are not SSOs.

SSO Categories:

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either:

- Reaches surface water and/or drainage channel tributary to a surface water; or
- Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Sanitary Sewer System or Sewer System

Refers to the sanitary sewer facilities that are owned and operated by the EBRPD in the four enrolled parks only.

Sensitive Areas

Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer Service Lateral

Refers to the piping that conveys sewage from the building to the sanitary sewer system

Sewer System Management Plan (SSMP)

Standard Specifications

Refers to the latest edition of the EBRPD Design Standards and Standard Details for Construction.

State Water Resources Control Board (SWRCB)

Refers to the California Environmental Protection Agency, State Water Resources Control Board.

Note: The State Board is a separate entity from the Santa Ana Regional Water Quality Control Board, although the agencies are closely connected.

Supervisory Control and Data Acquisition (SCADA)

Refers to the system that is employed by EBRPD to monitor the performance of its lift stations and to notify the operating staff when there is an alarm condition that requires attention.

System Evaluation and Capacity Assurance Plan (SECAP) SSMP Element VIII

Untreated or Partially Treated Wastewater

Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Vitrified Clay Pipe (VCP)

Waste Discharge Identification Number (WDID)

A unique identification number for the certification and reporting of collection system related actions and overflows in the CIWQS System. EBRPD has enrolled four parks separately and reports each under its own WDID as follows:

- 2SSO11410 Anthony Chabot
- 2SSO11481 Coyote Hills
- 2SSO11413 Del Valle
- 2SSO11411 Garin

Water Body

Any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Water of the State

Refers to “any surface water, including saline waters, within the boundaries of the state.” (California Water Code § 13050(e)).

Water Quality Monitoring Plan (WQMP)

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations

Matthew Graul

Dec 7, 2020

*Chief of Stewardship
Legally Responsible Official*

Introduction

1.1. Sewer System Management Plan

This Sanitary Sewer System Management Plan (SSMP) is a compendium of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the Est Bay Regional Park District's (EBRPD's) sanitary sewer system. EBRPD Board adopted its original four SSMPs on July 28, 2009 as required by the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (GWDR). It has been revised from the original adoption to provide a single consolidated SSMP for the four enrolled parks, improvements to the overflow emergency response, update asset information and condition assessment of the sewer infrastructure, include a water quality monitoring program, provide more clarity on the operations and maintenance and capital improvements for the four (4) enrolled parks regulated by the Waste Discharge Requirements for Sanitary Sewer Systems (WDR).

The State Water Resources Control Board (SWRCB) has issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of an SSMP. The State Water Board requirements are outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (GWDR), and Order No. WQ-2008-0002-EXEC, dated February 20, 2008, which was amended by Order No. 2013-0058-EXEC, effective September 9, 2013, which changed the Monitoring and Reporting Program (MRP) requirements. This SSMP is intended to comply with the GWDR and MRP revised requirements.

The structure (section numbering and nomenclature) of this SSMP follows the above referenced GWDR Section D13. This SSMP is organized by the SWRCB outline of elements; and contains language taken from the GWDR at that beginning of each element. The GWDR uses the term "Enrollee" to mean each individual municipal wastewater collection system that has completed and submitted the required application for coverage under the WDR (in this case, the Enrollee is EBRPD. EBRPD has four parks enrolled under the GWDR and their WDIDs are listed below in Table 1.

1.2. Sanitary Sewer System Facilities

EBRPD currently operates and maintains 34 parks located in Alameda and Contra Costa Counties. Of those parks, only four (4) meet the requirement for enrollment with the State of California under the WDR – those parks are Anthony Chabot, Coyote Hills, Del Valle and Garin (enrolled parks). Each of these parks has more than one mile of publicly owned sanitary sewers discharging to a publicly owned treatment facility. Three of the parks discharge to other municipal or special district agencies, while Del Valle has a self-contained evaporation pond for the treatment of all sewerage discharged to the sewer system. Del Valle's pond system is operated pursuant to a San Francisco Regional Water Quality Control Board Order No. 90-157.

Intro Tables 1 and 2, EBRPD Enrolled Parks Sanitary Sewer Asset Information provides a breakdown by park of the sewer asset information for each of these enrolled systems at the start of the revisions to the SSMP. These tables will need to be updated upon completion of the condition assessment project for the four enrolled parks.

Intro Table 1: Sewer Infrastructure Summary

| Park Name | WDID | Size, acres | Force Mains, miles | Gravity Lines, miles | Pump Stations, each | Discharge Location |
|----------------|-----------|---------------|--------------------|----------------------|---------------------|--------------------|
| Anthony Chabot | 2SSO11410 | 3,168 | 0.9 | 0.71 | 3 | CVSD |
| Coyote Hills | 2SSO11481 | 1,274 | 1.4 | 0.13 | 1 | USD |
| Del Valle | 2SSO11413 | 4,316 | 1.6 | 2.27 | 6 | On-site |
| Garin | 2SSO11411 | 3,314 | 0.3 | 0.42 | 1 | Hayward |
| Total | | 12,072 | 4.2 | 3.53 | 11 | |

Intro Table 2: Sewer Asset Summary

| Park Name | Manholes each | Laterals each | Restrooms, each | RV Dump Stations, each | Park Installation Date | System Age |
|----------------|---------------|---------------|-----------------|------------------------|------------------------|------------|
| Anthony Chabot | 5 | 11 | 3 | 0 | 1971 | 49 |
| Coyote Hills | 1 | 3 | 17 | 1 | 1992 | 38 |
| Del Valle | 40 | 44 | 4 | 0 | 1975 | 45 |
| Garin | 4 | 4 | 12 | 1 | 1978 | 42 |
| Total | 50 | 62 | 33 | 2 | N/A | N/A |

The sewer system in the enrolled parks consists of 3.53 miles of gravity sewers, 50 manholes, 62 publicly owned laterals, and 4.2 miles of pressure force mains, eleven (11) pump station and two (2) RV dump stations. The sewer lines range in size from four (4) inches to ten (10) inches in diameter. The District is fully responsible for installation, maintenance, and repair of all park sewer lateral(s). Current service area and sewer system maps of each of the four enrolled parks are contained in **Appendix A**. The following are brief descriptions of each of the four enrolled parks.

Anthony Chabot Regional Park

The sanitary sewer system at Anthony Chabot Regional Park is categorized as a park with campground, known as the Family Campground, servicing three public restroom facilities, several

vault toilets, sewer hookup for 12 campsites, an RV dump site, park residence and office area. The system includes 16 service lateral connections and 3 lift stations with multiple manholes and cleanouts. One of the lift stations has a duplex pump configuration which allows for alternating from one pump to the other. Sewage from the Chabot Family Campground area goes first to a small "package" pre-treatment plant southeast of the campground and then pumped to a gravity line under Grosvenor Drive which conveys it to the Castro Valley Sanitary District (CVSD) system. Some of the gravity line that is part of the system is located within Lake Chabot Regional Park, however, none of the sewage conveyed is generated in that park. The pre-treatment plant is manufactured by the Chicago Pump, Co and is also known as a hydroshear aerating tank or comminutor. The Chicago Pump Comminutor provides continuous screening and cutting of coarse entrained solids in sewage flows. It has a massive rotating drum design that is advertised to be virtually jam proof and requires substantially less operating horsepower than typical grinders. Upstream of the comminutor is a wastewater holding tank. Located in the gravity line upstream of the main line connection with CVSD and downstream of the comminutor is a flow control valve (Bailey Valve) that is used to dissipate energy when necessary.

Coyote Hills Regional Park

The sanitary sewer system at Coyote Hills Regional Park is categorized as a day use park servicing a public restroom facility within the Visitor Center. The system includes 3 service lateral connections and 1 lift station with multiple manholes and cleanouts. The lift station has a duplex pump configuration which allows for alternating from one pump to the other. Sewage from the Coyote Hills Visitor Center is gravity fed directly to the lift station and then pumped into the force main which essentially follows the Tuibun Trail, a paved park trail located on the north side of Patterson Ranch Road where it ultimately conveys to the Union Sanitary District (USD) system. The Park District intends to open a new campground, Dumbarton Quarry, in the near future. The sewage from that campground and associated facilities will be associated with the Coyote Hills system. The SSMP will be amended to include this addition.

Del Valle Regional Park

Del Valle Regional Park is located 9 miles south of the City of Livermore. Del Valle is owned by the State and operated and maintained by EBRPD. The sanitary sewer system is categorized as a park with a campground. The system includes 44 service lateral connections, a series of 6 pump stations, and an RV dump station. All wastewater flows through areas adjacent to Lake Del Valle and Arroyo Del Valle Creek to two sewer treatment ponds. As per the San Francisco Bay Regional Water Quality Control Board Order Number 90-157, the Del Valle Regional Park wastewater discharge system operates under the following waste discharge requirements:

Prohibitions include 1) Waste disposal shall not create a nuisance as defined in Section 13050(m) of the California Water Code; 2) Bypass or overflow of sewage from the collection system or evaporation ponds is prohibited; and 3) Sewage collection and disposal shall not degrade the quality of groundwater.

The specifications are: 1) To prevent threat of overflows, a minimum freeboard of 2 feet shall be maintained in each lagoon at all times; and 2) the fence that surrounds the lagoons shall be maintained and signs prohibiting public access to the wastewater ponds shall be adequately posted. In addition, the District shall make all necessary provisions to inform the public that the liquid contained in the wastewater ponds is sewage and unfit for human consumption.

Other provisions include: 1) compliance with a Self-Monitoring Report outlined in the Order; 2) allowing the Regional Board or its authorized representative a) entry upon premises in which effluent source is located or in which required records are kept; b) access to copy any records required to be kept under terms and conditions of the Order; c) inspection of any monitoring equipment or method required by the Order; and d) sampling of any discharge; 3) maintaining in good working order and operating as efficiently as possible all facilities to achieve compliance with the discharge requirements; 4) maintaining a copy of the Order at the site so that it will be available at all times to personnel operating waste treatment and disposal facilities; 5) filing a report of waste discharge with the Board at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge; and 6) notifying the Board in the event of any changes in control or ownership of land or waste discharge facilities presently owned or controlled.

Garin Regional Park

The sanitary sewer system at Garin Regional Park is categorized as a day use park servicing a park residence and a public restroom facility located near the Garin Barn Visitor Center. The system includes 4 service lateral connections and 1 lift station with multiple manholes and cleanouts. The lift station has a duplex pump configuration which allows for alternating from one pump to the other. Sewage from the Garin restroom facility is gravity fed directly to the lift station and then pumped into a portion of force main to get it up and over a hill where it flows via gravity toward a residential area southwest of the park near a dead-end street, MacDonald Way. From that point it is ultimately conveyed to the City of Hayward system.

Intro Table 3 provides the pipe diameter distribution of the gravity sewer pipes in the District collection system.

Intro Table 4 provides the composition of the gravity sewer piping by material of construction.

Intro Table 5 provides the installation age distribution of EBRPD's collection system.

Tables 3 and 4 were to be updated following the completion of the condition assessment of the gravity pipes at the four enrolled parks but the project was significantly delayed due to the Covid-19 pandemic. The tables will be updated upon completion and submittal of the final asset information and revised system maps early in 2021.

Intro Table 3: Gravity Sewer System Size Distribution

| Diameter, Inches | Pipe Length, Linear Feet | Portion of Sewer System, % |
|---------------------|--------------------------|----------------------------|
| 4 | | |
| 6 | | |
| 8 | | |
| 10 | | |
| Total | | |
| Total, miles | | |

Source:

Intro Table 4: Gravity Sewer System Materials of Construction

| Material | Pipe Length, LF | Percent of Sewer System |
|--------------------------|-----------------|-------------------------|
| Vitrified Clay (VCP) | | |
| Polyvinyl Chloride (PVC) | | |
| Cast Iron (CI) | | |
| Concrete (C) | | |
| Total | | |
| Total, Miles | | |

Source:

Intro Table 5: Gravity Sewer System Inventory of Sewer Lines by Pipe Age

| Age in Years | Construction Period | Linear Feet of Gravity Sewers | Miles of Gravity Sewer | Percent of System |
|--------------|---------------------|-------------------------------|------------------------|-------------------|
| 0-15 | 2000 - current | 1200 | 0.23 | 6.4 |
| 16 – 35 | 1980 – 1999 | 700 | 0.13 | 3.8 |
| 36 – 55 | 1960 – 1979 | 16,750 | 3.17 | 89.8 |
| 56 – 75 | 1940 – 1959 | 0 | 0 | 0 |
| 76 – 95 | 1920 – 1939 | 0 | 0 | 0 |
| 95 – 115 | 1900 – 1919 | 0 | 0 | 0 |
| >115 | Before 1900 | 0 | 0 | 0 |
| Total | | 18,650 | 3.53 | 100.0 |

Source: CIWQS Operational Performance 3/17/20 data applied to revised gravity system gravity sewers

1.3. References

- State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.
- State of California Water Resources Control Board Order No. WQ-2008-0002-EXEC, Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems dated February 20, 2008
- State Water Resources Control Board Order No. Order No. 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, September 9, 2013.

Element I: Goals

Goal: The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that do occur.

I-1: SSMP Goals

EBRPD's SSMP goals are to provide safe, effective, and efficient operation of EBRPD's sanitary sewer collection by:

Proper management, operation and maintenance (O&M) of the system: The District's Maintenance & Skilled Trades (MAST) staff will be knowledgeable of, and trained on, all aspects of the management and O&M of the sewer system for the four enrolled parks. This includes any new equipment, infrastructure or protocols that pertain to the system. In this way, the District staff will be able to maintain and improve system performance to adequately meet the needs and demands placed upon the Park District's sewer system.

Provide adequate capacity to convey peak flows: Sewer system equipment and infrastructure were engineered and designed to accommodate and convey peak flows. The District park supervisors are knowledgeable of visitor capacities and respond accordingly when these capacities are approached. If, for any reason, any part of the sewer system must be shut down, park staff will bring in additional resources to continue public service. Should new demands upon park facilities occur that would necessitate additional sewer system infrastructure and equipment, such improvements or expansions will be professionally designed and engineered to meet expected demand.

Minimize the frequency of SSOs: The District staff will be knowledgeable of, and trained to, provide appropriate monitoring (e.g., alarm system checks, lift station inspections) and maintenance (e.g., periodic lift station maintenance/repair, conveyance equipment replacement) of the sewer system equipment and infrastructure in order to ensure optimal system performance and timely repair to minimize the frequency of SSOs.

Mitigate the impact of SSOs: In the event of an SSO at one of the four enrolled parks, the District staff will immediately implement the Overflow Emergency Response Plan (OERP) to minimize and mitigate the impact of the SSO. This response plan will include but is not limited to proper notifications, emergency response, reporting and impact mitigation which are detailed in Element VI of the SSMP. OERP is located in **Appendix E**.

Be a part of the community and be a responsive public agency: The mission of the District is to preserve a rich heritage of natural and cultural resources and provide open space, parks, trails, safe and healthful recreation, and environmental education. An environmental ethic guides the District in all of its activities. The District envisions an extraordinary and well-managed system of open space parkland in Alameda and Contra Costa Counties, which will forever provide the

opportunity for a growing and diverse community to experience nature nearby. As part of this mission and vision, the District strives to provide a diversified system of regional parklands, trails, and parkland-related services that offer outstanding opportunities for creative use of outdoor time. This includes acquisition and preservation of significant biologic, geologic, scenic, and historic resources within Alameda and Contra Costa County.

I-2: References

None.

Element II: Organization

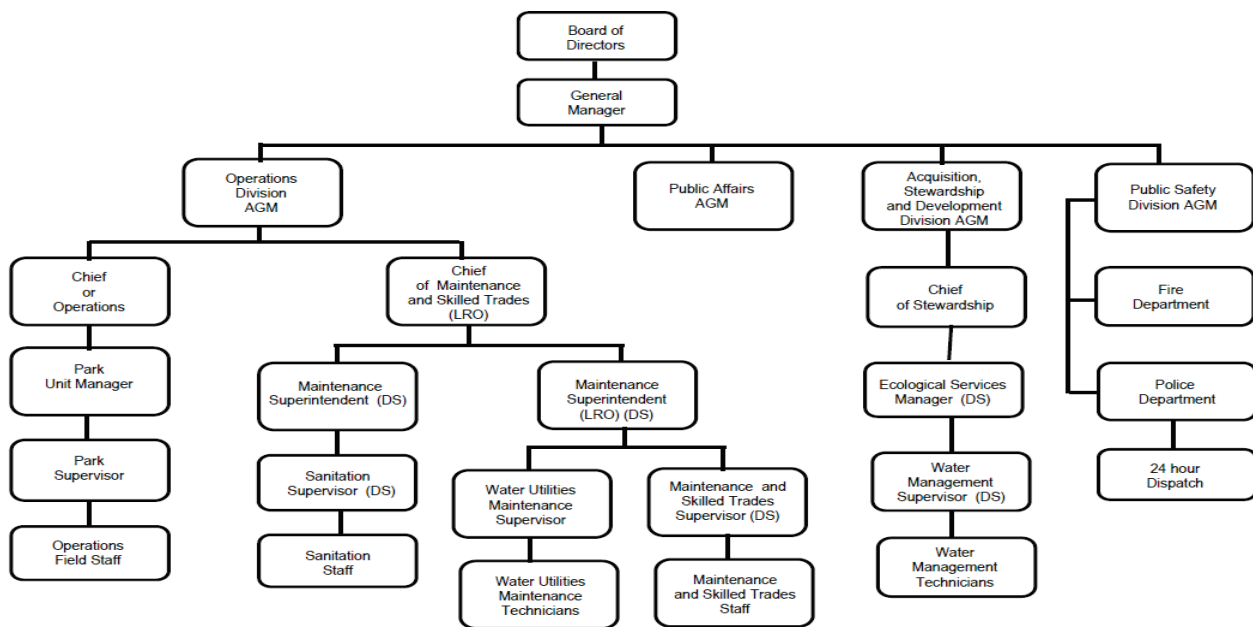
Organization: The SSMP must identify:

- (a) The name of the responsible or authorized representative as described in Section J of this Order.
- (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
- (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

II-1: Organizational Structure

The sanitary sewer collection system is operated and maintained by EBRPD MAST and Operations departments with the assistance of the Engineering Division for long range planning and capital program management. The organization chart for the management, operation, and maintenance of EBRPD’s sanitary sewer collection system is shown on the next page.

Figure II – 1: District Sewer Program Organization Chart



II-2: Authorized Representatives

EBRPD's *Legally Responsible Official(s)* (LRO) for wastewater collection system matters are identified below along with their roles and responsibilities for the sanitary sewer collection system operations. The below designated positions are the legally responsible officials (LRO) who are authorized to certify electronic spill reports and other required submittals to the SWRCB, the Office of Emergency Services (OES) and/or the CIWQS System. In addition, several positions are also designated as data submitters (DS) with access to the CIWQS system for data entry and data management.

General Manager – Overall responsibility for implementation, direction and leadership of the care and operations of an extensive park system.

Chief of Maintenance and Skilled Trades (LRO) – Manages District facilities, maintenance services and equipment.

Maintenance Superintendent (DS) – There are three positions with the following responsibilities.

- Manages district vehicle fleet, corporation yard oversight and specialized industrial equipment including sewage pumper trucks.
- Oversees Sanitation, Roads and Trails and assignment of work orders
- Water Utilities Provides District-wide maintenance of all sewer lift stations, water systems and associated equipment and infrastructure.

Sanitation Supervisor (DS) – Supervises collection/disposal of sewage and sanitation crews; coordinate emergency response related to sewer systems.

Sanitation Staff – Operates sanitation trucks and provide site labor to collect/dispose of park generated sewage, provide emergency response regarding sewage systems for the four enrolled parks. Currently there are four permanent drivers and one relief driver.

Maintenance and Skilled Trades Supervisor – Second in line under the Maintenance Superintendent who could provide authorization to call Roto-Rooter for blocked sewer lines at District residences.

Chief of Operations – Management of park rangers and supervisors and Unit Managers in operations of District's enrolled various parks and facilities.

Park Unit Manager – First level management responsibilities for parks and facilities, supervises park supervisors at each of the four enrolled parks.

Park Supervisor – Supervise field staff in O&M of parks, trails and facilities, acts as first responders to sewage overflows, weekly check on pump stations, manage root foaming needs, assists Sanitation during an overflow and clean-up of a sewage overflow.

Operations Field Staff – Performs O&M of District parks, , provides support to park supervisor for sewage overflows, monitoring sewer pumping systems within enrolled park boundaries

Chief of Stewardship (LRO) – Management of development and implementation of natural resources programs including District water resources program.

Environmental Services Manager (DS) – Manages and ensures regulatory compliance of District water resources, provides support to Maintenance Superintendent during sewage releases;

Water Management Supervisor (DS) – Manages and ensures regulatory compliance of District water resources, provides regulatory monitoring and sampling during sewage releases;

Public Affairs Assistant Manager – Coordinates media responses to issues and closure events in the four enrolled parks.

Public Safety Division, Dispatch 510-881-1833 – Provides support regarding public safety and 24-hour dispatch/communication services to support all departments and emergencies to ensure timely response to sewage releases.

Fire Department – Provides emergency response and support to any hazardous materials release including sewage.

Public Safety (Dispatch) – Provides emergency response and support to any park related incident including sewage releases.

Contracted Service Providers – EBRPD utilizes Roto-Rooter for emergency response support as needed as well as other service contractors for condition assessment and large repairs.

II-3: Responsibility for SSMP Implementation and Maintenance

The Chief of MAST shall have the overall responsibility for, implementing, periodically auditing, and maintaining EBRPD’s SSMP for the four enrolled parks subject to the State WDR. He/she may delegate these responsibilities to his/her staff.

Other District Staff responsible for developing, implementing, and maintaining specific elements of EBRPD’s SSMP, along with their job titles and contact information, are shown in **Table II – 1** on the next page.

Table II – 1: Responsible Officials for SSMP Elements

| Element | Element Name | Responsible District Official | Phone | Email |
|---------|---|------------------------------------|------------------------------|-----------------------|
| 0 | Introduction | Chief, MAST | 510-544-2563 | pending |
| 1 | Goals | Chief, MAST | 510-544-2563 | pending |
| 2 | Organization | Chief, MAST Chief of Operations | 510-544-2563 510-544-2500 | pending |
| 3 | Legal Authority | General Manager | 510-544-2000 | bdoyle@ebparks.org |
| 4 | O & M Program | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| 5 | Design and Performance Provisions | Chief of Design & Construction | 510-544-2304 | lgoorjian@ebparks.org |
| 6 | OERP | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| 7 | Fats, Oils and Grease (FOG) Control Program | Not currently applicable | N/A | N/A |
| 8 | System Evaluation and Capacity Assurance Plan | Chief of Design & Construction | 510-544-2304 | lgoorjian@ebparks.org |
| 9 | Monitoring, Measurement and Program Modifications | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| 10 | Program Audits | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| 11 | Communications Program | Assistant General Manager | 510-544-2008 | cjohnson@ebparks.org |
| App A | Enrolled parks Sewer Maps | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| App B | SSMP Board Adoption Documents | Environmental Services Manager | 510-544-2353 | BTuden@ebparks.org |
| App C | SSMP Audit Reports | Environmental Services Manager | 510-544-2353 | BTuden@ebparks.org |
| App D | SSMP Audit Checklist | Environmental Services Manager | 510-544-2353 | BTuden@ebparks.org |

| Element | Element Name | Responsible District Official | Phone | Email |
|---------|-------------------------------|-------------------------------|--------------|----------------------|
| App E | SSMP Change Log | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| App F | OERP | Maintenance Superintendent | 510-690-6641 | ebowman@ebparks.org |
| App G | Water Quality Monitoring Plan | Water Management Supervisor | 510-544-2328 | hmaclean@ebparks.org |

II-4: SSO Reporting Chain of Communication

The SSO Reporting process and responsibilities are described in the Overflow Emergency Response Plan (OERP) in **Appendix E**, Table B-1.

II-5: References

None.

Element III: Legal Authority

Legal Authority: Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);
- (b) Require that sewers and connections be properly designed and constructed;
- (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- (e) Enforce any violation of its sewer ordinances.

III-1: District Summary and Evaluation of Legal Authority

California Waste Discharge Requirements: On May 2, 2006, the SWRCB adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, GWDR Order No. 2006-0003. The WDRs are applicable to all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to publicly owned treatment facilities in the state of California. Specifically, the WDRs require all affected agencies, municipalities, counties, districts, and other public entities to take a proactive approach to ensure a system-wide operation, maintenance, and management plan is established to effectively reduce the potential, quantity, and frequency of SSOs that may occur and impact surface waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. On September 9, 2013 the SWRCB revised the Monitoring and reporting Program by Executive Order WQ 2013-0058-EXEC revising the number of overflow categories, revising reporting requirements and adding the requirement for technical reports for spills greater than 50,000 gallons to surface waters.

The Park District's Board of Directors has adopted revisions to its Ordinance 38, Rules and Regulations that provide the requisite legal authority for enforcement of sanitary sewer system regulations, including prevention of illicit discharges into the District's sanitary sewer system, as well as the proper management and design of the sanitary sewer system. Because the District owns all sewer pipes, laterals, manholes and cleanouts, many of the specific WDR legal authorities required of most private property owners that discharge to a public sanitary sewer system are not applicable to the District's sanitary sewer system. In addition, none of the four enrolled parks contain food service establishments for the public, they therefore do not need to

have a program for the prevention of discharge of fats, oils and grease to the parks sewer systems. Further, the District has developed proper signage and notification to all customers that the disposal of FOG in restrooms or any other District sewer asset is not allowed. The District, when necessary to supplement existing standards, incorporates the Standard Plans and Specifications for Public Works Construction (Green Book), to properly design and construct sewer facilities.

Table III-1: Summary of Legal Authorities provides the information to comply with applicable WDR requirements for legal authority.

Table III – 1: Summary of Legal Authorities

| Requirement | District Ordinances References Ordinance No. 38 |
|--|--|
| Prevent illicit discharges into the wastewater collection system | 811 |
| Limit the discharge of fats, oils, and grease and other debris that may cause blockages | 811 |
| Require that sewers and connections be properly designed and constructed | 701 Green Book by Public Works Stds., Inc. |
| Require proper installation, testing, and inspection of new and rehabilitated sewers | 701 & 811 Green Book by Public Works Stds., Inc |
| Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements | N/A |
| Authority to inspect grease producing facilities – EBRPD owns all facilities | N/A |
| Enforce any violation of its sewer ordinances | 301 |

III-2: Agreements with Satellite Agencies

The three of the four enrolled park sewer systems are satellite systems discharging to agencies that transport and treat all sewage from each of the three parks. EBRPD have approved agreements with the three agencies for the discharge, treatment and transport emanating from the parks. Del Valle has an onsite treatment and disposal system and is fully self-contained and permitted by the State for the onsite treatment operations.

III-3: References

The data used in this section were taken from the following references:

- Agreement Between the Castro Valley Sanitary District and the East Bay Parks District for the Provision of Sanitary Sewer Services to Properties Outside of the Castro Valley Sewer District dated May 31, 1971 as amended May 18, 1977.

Element IV: Operations and Maintenance Program

Operation and Maintenance Program. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
- (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

IV-1: Collection System Mapping

The District has historically maintained sewer system maps that detail locations and system assets in the four enrolled parks sanitary sewer systems but have not included the asset details like size, material, age or other design information. In 2020, the District completed a full assessment of the gravity piping systems, the publicly owned laterals and the system access points to the gravity sewer system. This effort resulted in updated sewer system mapping and captured full gravity asset information that will be included in the existing District asset management software. The District will begin mapping and inventorying the forced main lines in 2021. The current maps of the four parks are included in **Appendix A** of this SSMP for information and use by District staff and the public.

The District land is primarily undeveloped and has only a few storm drains. The District, as part of its District-wide culvert mapping effort will create large scale maps of the storm water systems at the four enrolled parks to help assist with emergency response. These are planned for completion by the end of 2022 and will be made available in each of the Park offices or in the Sanitation vehicles for immediate use in the field.

IV-2: Preventive Operation and Maintenance (O&M)

The elements of EBRPD's sewer system O&M program include:

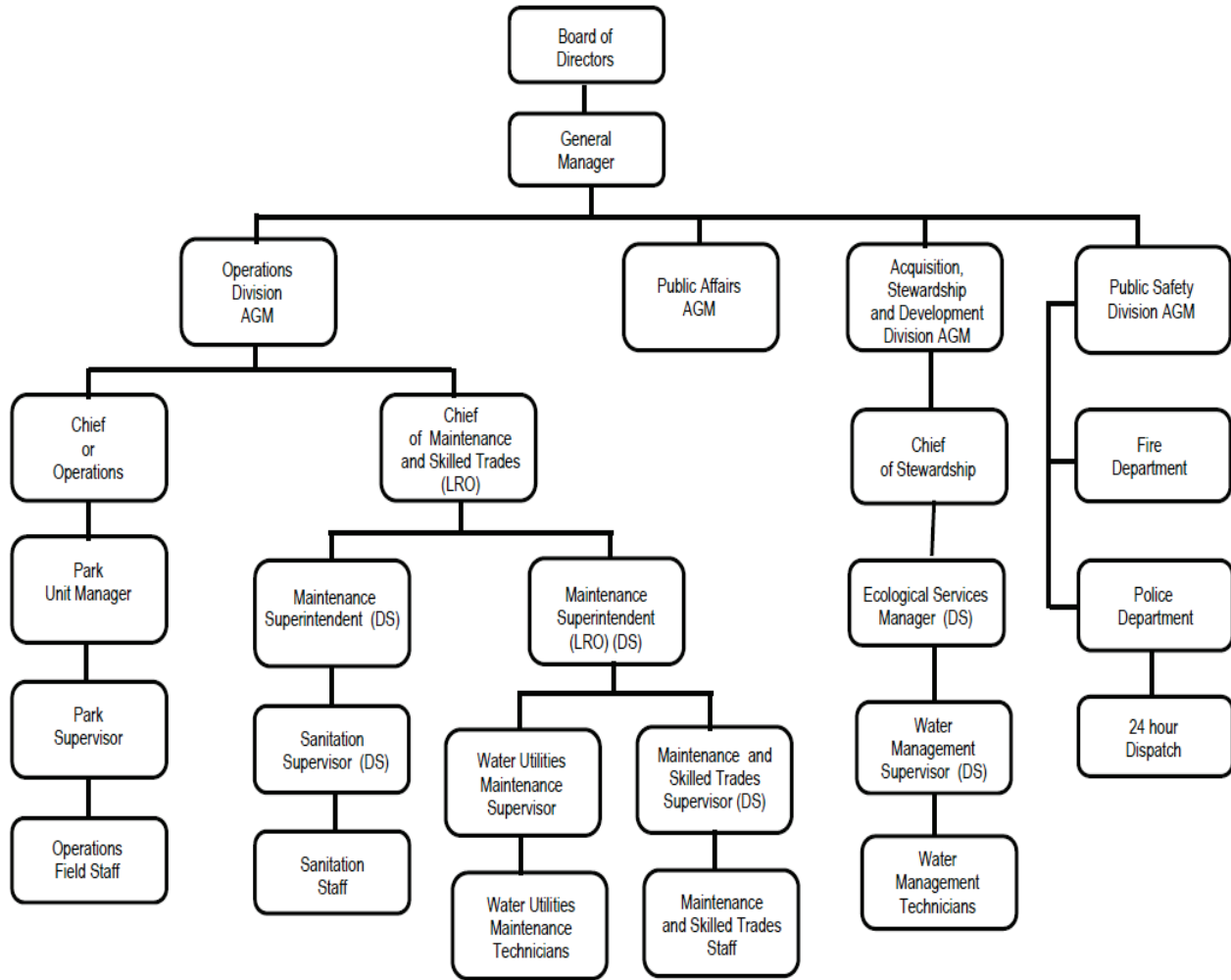
- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Periodic inspection and preventive maintenance for the pump stations and force mains;
- Rehabilitation and replacement of sewers that are in poor condition; and
- Proper training for District employees and contractors to assure proper operations and maintenance of the collection system facilities.

The District's classifications identified below in **Figure IV-1 District Sewer Program Organization Chart** is responsible for the normal maintenance and operations of the sanitary sewer collection system and the proper planning and emergency response.

Sanitary sewer program operations and maintenance are the responsibility of Maintenance and Skilled Trades (MAST) Department, Water Utilities Maintenance and Sanitation Units. All maintenance and emergency response activities are overseen by two Maintenance Superintendents responsible for lift station operation and inspection, pumping of vault, chemical toilets and RV dump facilities and general sanitation operations of all sanitary sewer program assets at the four enrolled parks. The Sanitation Unit is directly responsible for the scheduling and coordination of regular sewer maintenance (cleaning and CCTVs) of the pipelines (gravity and pressure lines) and lateral connections. This includes CCTV of the gravity lines and ensuring regular operations and maintenance of all sewer related assets. All MAST operations and maintenance programs are coordinated with the Parks Supervisors. Staff may rely on service contractors for some maintenance activities such as root control and condition assessment. The Water Utilities Supervisor is responsible for the operation, maintenance and coordination with parks staff of the eleven sewage pump stations in the four parks. Pump station weekly maintenance check is performed by Park Operations staff, ongoing maintenance is performed by MAST staff and pump station assessments will be conducted by qualified professional engineers.

The District is currently using the FAMIS computerized maintenance management system (CMMS) for the maintenance management of other District non-linear assets. As part of the condition assessment project, sewer related asset information is to be inserted into the FAMIS system and thereafter the system will be used to schedule, manage and coordinate sewer related operations and maintenance.

Figure IV – 1: District Sewer Program Organization Chart



IV-2.1: Gravity Sewer Maintenance

MAST, utilizing the 2020 results of the maintenance condition assessment at the four parks, is in the process of developing a formal operations and maintenance program for the sewer lines in the enrolled parks. It is the intention that in 2021-2023, the District will complete a full asset inventory of the sewer assets and adjust the cleaning and maintenance program to reflect the findings from the assessment as well as completing the cleaning of all gravity sanitary sewer lines in the enrolled parks. It is anticipated that at a minimum, each enrolled park will have its gravity lines cleaned every four years. Sanitation will oversee and track the cleaning frequency and locations.

Future cleaning operations may be required more frequently upon the cleaning results identified in **Table IV-1: Standard Measures of Observed Results for Collection System Line Cleaning** below for cleaning results.

Table IV – 1: Standard Measures of Observed Results for Collection System Line Cleaning

| Category | None | Low | Medium | High |
|----------------------|---|---|---|---|
| Debris / Grit | Code: CL No observable debris or grit | Code: DL Minor amount of debris 15 minutes or less to clean 1 Pass | Code: DM Less than 5 gallons of debris 15-30 minutes to clean 2-3 passes required Requires cleaning twice or less per year Only fine grit | Code: DH More than 5 gallons of debris More than 30 minutes to clean More than 4 passes required Requires cleaning four times per year Operator concern for future stoppage |
| Grease | Code: CL No observable grease | Code: GL Minor amounts of grease 15 minutes or less to clean 1 pass | Code: GM Small chunks / no “logs” 15-30 minutes to clean 2-3 passes required Requires cleaning twice or less per year | Code: GH Big chunks / “Logs” More than 30 minutes to clean More than 4 passes required Operator concern for future stoppage |
| Roots | Code: CL No observable roots | Code: RL Minor amounts of roots 15 minutes or less to clean 1 pass | Code: RM Thin / Stringy roots present No large “clumps” 15-30 minutes to clean 2-3 passes required | Code: RH Thick roots present Large “clumps” More than 30 minutes to clean More than 4 passes required Operator concern for future stoppage |
| Other | Code: CL No observable materials | Code: OL Specify material Minor amounts of material | Code: OM Specify material Less than 5 gallons of material | Code: OH Specify material More than 5 gallons of material Operator concern for future stoppage |

Footnote: (a) Times shown are typical manhole to manhole distance of 250 feet. Longer runs will require longer cleaning times. Judgement will need to be applied by the field crews for varying lengths and pipe diameters.

IV-2.1.1: Manhole Inspection and Maintenance Program

The manholes and laterals in the four enrolled parks are inspected and assessed at a minimum every 4 years along with the regular cleaning program. Any conditions found are reported and are evaluated for future repair, improvement or replacement and any identified needs are included in the annual capital program.

IV-2.2: Pump Station Maintenance

There are eleven (11) lift stations located in the EBRPD's four enrolled parks. Stations are monitored remotely through a Supervisory Control and Data Acquisition (SCADA) system.

All pump stations are operated and maintained by park operations staff and MAST personnel. There is a total of 4.2 miles of small diameter force mains immediately downstream of these pump stations either discharging to municipal or special district sewer systems or to the sewage treatment system at Del Valle. The EBRPD owns and maintains the force mains. The lift station asset information is identified below in Table IV-2.

Table IV – 2: Lift Station Locations and Asset Information*

| Pump Station Name | Enrolled Park | Construct Date | No. Pumps | Pump GPM | Pump Manufacturer | Pump HP |
|---------------------|----------------|----------------|-----------|--------------|-------------------|---------|
| Puma Point | Anthony Chabot | 2007 | 2 | 175gpm@28.5' | Flygt | 5 |
| Treatment Plant | Anthony Chabot | 1971 | 1 | 5000gpd | Chicago | 1/3 |
| Park Office | Anthony Chabot | 1984 | 2 | 18gpm@20' | Zoeller | 1/5 |
| Coyote Hills | Coyote Hills | 1992 | 2 | 100gpm@70' | Flygt | 7.5 |
| Garin | Garin | 2007 | 2 | 77.3gpm@125' | Flygt | 10 |
| Del Valle Station 1 | Del Valle | 2003 | 2 | 215gpm@161' | Flygt | 23 |
| Del Valle Station 2 | Del Valle | 2007 | 2 | 110gpm@180' | Flygt | 23 |
| Del Valle Station 3 | Del Valle | 2003 | 2 | 110gpm@110' | Flygt | 23 |
| Del Valle Station 4 | Del Valle | 2007 | 2 | 145gpm@70' | Flygt | 10 |
| Del Valle Station 5 | Del Valle | 1999 | 2 | 120gpm@125' | Flygt | 23 |
| Del Valle Station 6 | Del Valle | 2007 | 2 | 92.3gpm@85' | Flygt | 6 |

* District supplied infrastructure file dated 9/18/20

Each of the lift stations described in Section IV-2.2 above discharges through pressure force mains to the EBRPD sewer collection system as described in Table IV-3 below. These force mains alignments are inspected annually and the discharge manholes into the collection system are inspected for concrete corrosion regularly.

The four enrolled parks currently contain eleven (11) sewage pumping stations ranging in size from 18 gallons per minute to 120 gallons per minute. Each of the stations is self-contained and includes a wet well, two submersible pumps, discharge valving and pressure piping, pump control panels with multistart controllers, level probes, alarms and telemetry to the South Corporation Yard and Dispatch. Each of the pump stations are being monitored using the MultiTrode MultiSmart Pump Controllers in 2007. With the MultiSmart controller, there are several fail-safe features built into the system. For instance, the controller has alarms and also pre-alarms, where an operator is notified prior to an alarm. The system isn't limited to only alarms for failures. It's also able to pinpoint potential failures and other problems before they happen. Staff who control the pump stations are able to log into a station and take a critical look and see if a pump has failed to start, or a pump is starting too fast, or even if the sun is heating the inside of the control panel and causing a component to malfunction. Any of these conditions would prompt a pre-alarm

signal. The MultiSmart controller not only sends a signal, but it is also capable of identifying the problem.

Supervisory Control and Data Acquisition (SCADA) was put online in 2010 and is used to interface with the MultiSmart controllers. A centralized network is able to reset, troubleshoot and otherwise correct the majority of problems directly from either a remote location computer or a centralized computer. With SCADA, the operators can see what the problem is, what caused the problem, and decide to either reset it from the base computer or dispatch someone to the station for service. The dispatcher can tell that person exactly what they're going out there for, exactly what they're going to be doing, and exactly what they need to bring with them.

In the District, flexibility in pump station control is an important issue. Sudden population shifts at the park may require a station to perform differently, or alarm criteria change to accommodate a critical upcoming event. In the past the pumps were either on or off, and the same applied to the alarms. The controllers also allow stations to communicate with each other. This is a very valuable feature. In cases where there are long distances to the sewer, there are often multiple stations connected serially. If one station fails, it can communicate to the stations behind it to stop pumping and become holding tanks to eliminate the risk of overflow.

Regular operations are day-to-day overseen by properly trained parks personnel who are responsible for weekly monitoring and documentation to verify reliability and overall station cleanliness and housekeeping according to the latest version of the Operators Guide. All major maintenance is conducted twice a year by the Water Utilities Maintenance Supervisor or his/her designee or by service contracts with pump or electrical contractors. These inspections will be documented through FAMIS. Annually MAST Personnel shall use the Annual Pump Station/Force Main Condition Checklist to assess the current condition of the pumping station and force main. These annual assessments are intended to identify any necessary changes or concerns in and around the pump station and along the alignment and discharge point for the force mains. Every four years an outside condition assessment of each of the pump stations is prepared by a professional engineer that will assist in the development of priorities for repair and replacement of these important sewage assets during and at the end of their useful lives.

IV-2.3: Force Main Operations and Maintenance

The District is waiting for results from its force main assessment before defining the operations and maintenance program for all sewer related force main assets. The District currently estimates that there are approximately 22,100 linear feet of various sized pressure force mains that transport sewage from the lift stations. **Table IV-3: Force Main Locations and Descriptions** provides the asset information of each of the eleven force mains. The pressure lines operate to lift sewage in the parks or to transport sewage to either the disposal ponds at Del Valle or into the sewer collection system of the three agencies that provide treatment and disposal for District sewage (See Table Intro 1). It is anticipated that full inspection, maintenance and condition assessment of force mains will be initiated in 2021 and a regular maintenance program based on the condition findings will be developed no later than end of 2023.

Table IV – 3: Force Main Locations and Descriptions*

| Name of Lift Station Associated with Force Main | Enrolled Park Name | Year Constructed | Force Main Asset Information | | |
|---|--------------------|------------------|------------------------------|---------------|----------------|
| | | | Length (linear feet) | Size (inches) | Material Type* |
| Puma Point | Anthony Chabot | 1971/2007 | TBD | 3" | PVC |
| Treatment Plant | Anthony Chabot | 1971 | TBD | 4" | Ductile |
| Park Office | Anthony Chabot | 1984 | TBD | 3" | PVC |
| Coyote Hills | Coyote Hills | 1992 | 1.40 | 4" | PVC |
| Garin | Garin | 1978 | 0.30 | 3" | PVC |
| Del Valle Station 1 | Del Valle | 1974 | TBD | 3"/4" | PVC |
| Del Valle Station 2 | Del Valle | 1974 | TBD | 3"/4" | PVC |
| Del Valle Station 3 | Del Valle | 1974 | TBD | 3"/4" | PVC |
| Del Valle Station 4 | Del Valle | 1974 | TBD | 3"/4" | PVC |
| Del Valle Station 5 | Del Valle | 1974 | TBD | 3"/4" | PVC |
| Del Valle Station 6 | Del Valle | 1974 | TBD | 3" | PVC |
| Total | | | 4.2 | | |

*Source: District supplied infrastructure file dated 9/18/20

IV-2.4: Root Control Operations and Maintenance

EBRPD has utilized chemical root control service contractors to address root issues periodically at various of the enrolled parks. These service contractors supplement EBRPD cleaning efforts including jet-rodder/vactor to cut and remove roots found in the system. The 2020 CCTV condition assessment on gravity lines and manholes recommended a coordinated and comprehensive program to deal with root in sewer pipelines. Moving forward, each park supervisor will assume the responsibility for management, scheduling, tracking and contracting all root-foaming needs. Root control is typically conducted every two or three years depending on the degree of root incursion at the joints or in pipe failures. The need is typically determined during cleaning operations and in the future will be specified and confirmed by CCTV evaluation in line segments felt to contain roots. The enhanced CCTV evaluations will allow the District to develop a well-defined root control program.

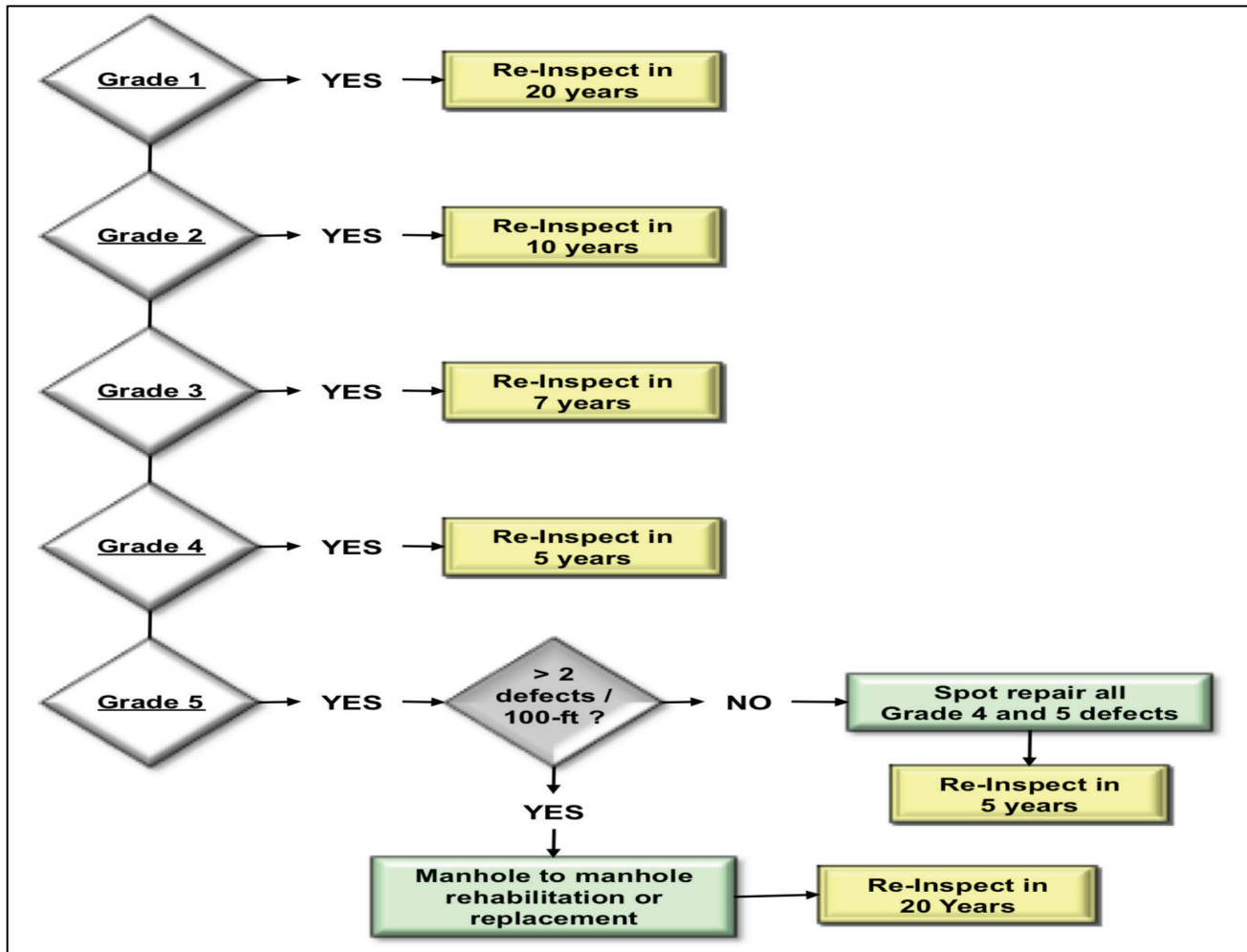
IV-3: Rehabilitation and Replacement Program

At the time that these revisions to the SSMP are being prepared, the District was completing its asset confirmation and condition assessment of the gravity sewer laterals, gravity pipelines, manholes and cleanouts at the four enrolled parks. These assets are being assessed for both structural and maintenance conditions using closed circuit television (CCTV) inspection equipment. The assessments utilize the NASSCO North American Standard Pipeline Assessment Certification Program (PACP) for defect identification and assessment. The PACP system will provide condition ratings from 1 to 5 for each gravity pipe segment, lateral, cleanout and

manhole. These ratings range from 1 to 5 indicating the best to the worst condition of the asset. Typically, any structural rating of 4 or 5 will require further evaluation and possible repair or replacement. The results of this work will be used to develop a prioritized renewal and replacement program along with establishing the return frequency for future assessments of these assets. Future CCTV condition assessments of the gravity pipelines will be based upon **Figure IV-3: CCTV Return Frequency Flow Chart** below and the results of the current condition rating.

The District also has a similar footage of pressure pipelines that have never been assessed. In the next two years, the District will be completing a full force main asset register and condition assessment of these important assets and will thereafter establish a force main operation and maintenance program along with a regular condition assessment program for the future by end of calendar 2023.

Figure IV – 2: CCTV Return Frequency Flow Chart



In 2007, the District conducted condition assessment of the eleven pump stations in the four parks. Five (5) of the pump stations were rehabilitated in 2007 and the Water Utilities Division regularly assesses general condition of the pump stations, evaluates the equipment and telemetry

conditions at each station for proper operation and future replacement needs. Moving forward, the Water Utilities Division will annually conduct pump station and force main inspection completing the Pump Station/Force Main Condition Assessment Checklist included as **Supplement IV-1**.

The District has developed a planning level short-term and long-term capital planning program. Planning for the next six years for the sewer program of the four enrolled parks based upon the general needs of the parks is included as **Supplement IV-2: Capital Improvement Program** below. The long-term plan will include specific project identification as the prioritized needs are better defined from the assessment program.

The capital renewal and replacement for sewer system assets are currently funded through the District's Major Infrastructure Renovation and Replacement (MIRR) Fund Policy. The MIRR Policy is funded with annual contributions established by the Board of Directors as part of the annual capital program for all District park assets. In addition, the District has also established a sinking fund for large and expensive equipment valued at greater than \$50,000. These funds are available to fund the replacement of included equipment owned and operated by the entire District.

IV-4: Training

The District currently has four departments that are involved in the operations and maintenance and emergency response for the District's sewer program. They are MAST, Park Operations, Stewardship and Public Safety (Dispatch). Each of these departments conducts annual training on the waste discharge requirements and the important SSMP requirements, while the MAST employees required more in-depth training for both operations and emergency response. The MAST training will also include emergency response field exercises and volume estimation techniques (see OERP for additional information). The District will be developing a basic WDR and SSMP training module for each of the departments and will create additional expanded training for especially the Parks Operations (first responders) and Sanitation Division of MAST. It is anticipated that the basic module will be available and administered not later than the next SSMP Audit in 2021. Park Operations at the four enrolled parks will require bi-annual first responder training as well as a review of emergency response assistance to be provided to Sanitation during overflow events. The specific training for Sanitation will include both maintenance and condition assessment contracting and reporting as well as specific emergency response training to include traffic control, volume estimation and incident reporting and certification. Finally, Stewardship also requires annual training on the Water Quality Monitoring Plan (WQMP) that is implemented when sampling and testing of the impacts of overflows is required.

The Maintenance Superintendent for Water Utilities Maintenance has developed a specific training program for Parks personnel and annually trains on the Pump Station Operators Guide with each of the enrolled parks personnel.

IV-5: Equipment and Replacement Parts

Critical parts and equipment, such as tools, pipe, hydro vac parts, and portable pumps, are tracked on a Critical Parts and Equipment List. Parts and equipment are currently replaced as they are used. A list of these critical equipment and replacement parts are found in **Supplements IV-3 and IV-4** below. In the event of an emergency, local retailers are available to supply additional needed equipment and parts on short notice.

The list of the major equipment that the District uses in the operation and maintenance of its sewer system is included in **Supplement IV-3: Major Sewer System Equipment Inventory**.

The District has developed a Critical Replacement Parts List included in **Supplement IV-4: Critical Sewer System Replacement Parts Inventory**.

IV-6: Outreach to Sewer Service Contractors

All contractors work on and around sewer program assets in the four enrolled parks only are required to meet the training requirements included in the general and specific project specifications. In addition, they are required to provide an emergency response plan at least as complete at the District OERP. Contractors must certify that all employees on a job have proper training regarding sewer related incidents and events.

IV-7: References

The data used in this section were taken from the following references:

- Wastewater Pump Station Operators Guide, Version 2.06

Supplement IV-1: Annual Pump Station and Force Main Assessment Checklist

| Inspection Information | |
|-------------------------|--|
| Inspection date | |
| Inspection participants | |
| Facility name | |
| Facility address | |
| Comments | |

| Background Information (Prior 12 Months) | |
|--|--|
| SSOs | |
| Equipment failures | |
| Alarm history (attach copy) | |
| Major maintenance activities (attach list if applicable) | |
| Pending work orders (attach copies) | |
| Operating problems (attach copy of operating log) | |
| Comments | |

| Security Features | |
|--|--|
| Fence and gate | |
| External lighting | |
| Visibility from street | |
| Doors and locks | |
| Intrusion alarm(s) | |
| Signs with emergency contact information | |
| Other security features | |
| Comments | |

| Safety Features and Equipment | |
|---|--|
| Signage (confined space, automatic equipment, hearing protection, etc.) | |
| Fall protection | |
| Emergency communication | |
| Equipment hand guards | |
| Handrails and kickboards | |
| Platforms and grating | |
| Tag out and lock out equipment | |
| Hearing protection | |
| Eye wash | |
| Chemical storage | |
| Comments | |

| External Appearance | |
|-------------------------|--|
| Fence | |
| Landscaping | |
| Building | |
| Control panels | |
| Other external features | |
| Comments | |

| Building/Structure | |
|-----------------------|--|
| Lift Station building | |
| Control room | |
| Dry well | |
| Wet well | |
| Other structures | |
| Comments | |

| Instrumentation and Controls (including SCADA Facilities) | |
|---|--|
| Control panel | |
| Run time meters | |
| Flow meter | |
| Wet well level | |
| Alarms | |
| SCADA HMI/PLC | |
| Other instrumentation & controls | |
| Comments | |

| Electrical and Switch Gear | |
|--|--|
| Power drop | |
| Transformers | |
| Transfer switches | |
| Emergency generator and generator connection | |
| Starters | |
| Variable frequency drives | |
| Electrical cabinets | |
| Conduit and wireways | |
| Other electrical | |
| Comments | |

| Motors | |
|-------------------------|--|
| Lubrication | |
| Insulation | |
| Operating current | |
| Vibration and alignment | |
| Other | |
| Comments | |

| Pumps | |
|---------------------------------------|--|
| Lubrication | |
| Vibration and alignment | |
| Seals | |
| Indicated flow and discharge pressure | |
| Shutoff head | |
| Corrosion and leakage evidence | |
| Drive shaft | |
| Other | |
| Comments | |

| Valves and Piping | |
|-------------------|--|
| Valve operation | |
| Valve condition | |
| Pipe condition | |
| Pipe support | |
| Other | |
| Comments | |

| Other | |
|------------------------------------|--|
| Lighting | |
| Ventilation | |
| Support systems (air, water, etc.) | |
| Signage | |
| Employee facilities | |
| Sump pump | |
| Overhead crane | |
| Portable pump connections | |
| Portable pumps | |
| Comments | |

Supplement IV-2: Capital Improvement Program, in thousands of dollars

| Project Title | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|--|------------|------------|------------|------------|------------|------------|
| Sewer Asset Sinking Fund Contributions | | | | | | |
| Complete Asset Inventory (4 parks) (force main assets, etc.) | 50 | 50 | 0 | 0 | 0 | 0 |
| Develop Sewer Asset Replacement Program/Sinking Fund Contribution & Policy | 25 | 25 | 25 | 0 | 0 | 0 |
| Sewer Asset Replacement Contribution - Fund 553 | 250 | 250 | 250 | 250 | 250 | 250 |
| Sewer Equipment Replacement Contribution – Fund 554 | 75 | 75 | 75 | 75 | 75 | 75 |
| Capital Program | | | | | | |
| Sewer Master Plan (4 enrolled parks only) | 0 | 75 | 0 | 0 | 0 | 0 |
| Annual Equipment Purchases/Replacements | 100 | 100 | 0 | 0 | 500 | 0 |
| RV Dump Station Renewal and Replacement | 120 | 0 | 10 | 0 | 0 | 20 |
| Annual Sewer Pipeline Repair and Rehabilitation | 50 | 50 | 50 | 50 | 50 | 75 |
| Annual Pump Station Renewal and Replacement | 25 | 25 | 25 | 50 | 25 | 25 |
| Annual Pump Station Telemetry Upgrades/Improvements | 10 | 10 | 10 | 10 | 10 | 10 |
| | | | | | | |
| Total Annual Expenditures Required | 705 | 660 | 445 | 435 | 910 | 455 |

Supplement IV-3: Major System Equipment Inventory

| Equipment Number | Equipment Description | Quantity | Year Purchased | Location |
|------------------|---|----------|----------------|----------|
| | Sanitation truck – 3000 gallons | 4 | | |
| | 4X4 Sanitation truck – 500 gallons | 1 | | |
| | Push sewer camera – 200-foot cable | 1 | | |
| | Metrotech line tracing kit with transmitter, push rod, receiver | 1 | | |
| | Confined space entry equipment | | | |
| | Sewer tools including pipe cutters | | | |
| | | | | |
| | | | | |

Supplement IV-4: Critical System Replacement Parts Inventory

| Part Description | Number in Stock | Location |
|------------------------|-----------------|-----------------|
| SCADA System Boards | | South Corp Yard |
| Manhole Covers | | South Corp Yard |
| Standby & Bypass pumps | | South Corp Yard |
| Plugs | | South Corp Yard |
| PVC pipes for repair | | South Corp Yard |

Element V: Design and Performance Provisions

Design and Performance Provisions:

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

V-1: Design Criteria for Installation, Rehabilitation and Repair

The District's plans and specifications are required to comply with the applicable codes, ordinances and regulations of the local sanitary Districts and incorporated cities within Alameda and Contra Costa Counties having legal jurisdiction at the location of such facilities. In addition to local codes and ordinances, the District, as needed, incorporates the Standard Plans and Specifications for Public Works Construction (Green Book) latest edition, to properly design and construct sewer facilities.

This approach requires establishing design criteria for each project for the selection of pipe materials, pipe sizes, slopes, trenches depths, backfill cover, manhole structures and other factors that are satisfactory to the regulatory entities. All sewer asset projects will be designed by professional engineers which will establish relevant project plans and specification along with the determination of proper design criteria.

V-2: Inspection and Testing Criteria

1. **Standards for Installation and Repair:** The East Bay Regional Park District's vision is to preserve a priceless heritage of natural and cultural resources, open space, parks and trails in Alameda and Contra Costa Counties. Park visitors enjoy the use of diverse facilities including public restrooms at most parks. The District is responsible for implementing a construction, O&M program for all District facilities serviced by a sanitary sewer system at those parks.

The District's standard plans and specifications for the installation, rehabilitation and repair of sanitary sewers cover the design, construction, O&M of gravity and low-pressure sanitary sewers and manholes are all required to be designed by professional engineers who establish proper design criteria as part of the design process for any sewer assets.

2. **Standards for Inspection and Testing of New and Rehabilitated Facilities:** Sewer system inspections during construction or repair are coordinated by the District construction inspector or District representative assigned to that project. Code, inspection and test criteria are set in the design documents generated by the appropriate design

professional. In most cases the construction inspector has the capability to perform the necessary inspections and assure design requirements are met however the inspector has the authority to call in specialty inspectors and District personnel as necessary to inspect work that may require special expertise or expertise outside the inspector's scope of knowledge.

Inspection criteria may include material sampling and compaction testing of sub grade; concrete testing for structures; air and water pressure tests for pipes; leak testing and coating thickness of special coatings for wet wells and manholes; electrical testing of controls and control systems and manufacturer testing and certification of pump installations. If necessary, particularly on existing systems, inspection by CCTV or mandrel may be required. Also included is continuous physical and visual inspection as the installation progresses. If the sewer system has operational parts (such as a sewer lift station) District O&M personnel are provided operating and services manuals and operational training through the contractor and system manufacturer.

A sewer system is accepted based on a final inspection attended, at a minimum, by the contractor representative, and qualified District representative. Others may attend as necessary including technical support, design professionals and other District managers. This acceptance is based on verification that the system has been correctly installed, successfully tested and is operating properly, personnel have been trained and the system is visually acceptable.

V-3: References

The data used in this section were taken from the following references:

- District Ordinance No. 38, Section 701 and 811.
- Standard Specifications for Public Works Construction (Green Book) latest version

Element VI: Overflow Emergency Response Plan

Overflow Emergency Response Plan - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- (b) A program to ensure an appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

VI-1: Purpose

The purpose of the EBRPD’s Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for Parks, MAST, and Stewardship personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within EBRPD’s enrolled parks. The OERP (**Appendix E**) satisfies the SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan.

VI-2: Policy

EBRPD’s MAST personnel are required to report all wastewater overflows from public sewer infrastructure and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect

the environment. EBRPD’s goal is to respond to sewer system overflows as soon as possible following notification. EBRPD will follow reporting procedures in regard to sewer spills as set forth by the San Francisco Regional Water Quality Control Board (SFRWQCB) and the California State Water Resources Control Board (SWRCB).

VI-3: Goals

EBRPD’s goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

VI-4: Full Overflow Emergency Response Plan

The full copy of EBRPD Overflow Emergency Response Plan (composed of Narratives and Workbooks for Sanitation and Parks) effective October 2020 can be found in **Appendix E** along with copies of all instructions, notifications and forms in the Sanitation Workbook for the complete documentation of a sewage overflow. In addition, EBRPD has also developed and implemented a separate Parks OERP Workbook to guide the first responders at each of the parks who are tasked with being the initial respondents to an overflow. The Parks Workbook is also included in **Appendix E**. Both of these documents are intended to be used as stand-alone operating procedures for all responders to an overflow event. Finally, Stewardship has the responsibility for all SSO sampling and testing and shall be conducted per the EBRPD Water Quality Monitoring Plan (WQMP) which is included in **Appendix F**.

VI-5: Authority and References

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order 2013-009-DWQ effective September 9, 2013

Element VII: Fats, Oils, and Grease (FOG) Control Program

FOG Control Program: Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FROG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

VII-1: Nature and Extent of FOG Problem

Based on the historical absence of grease-based sewer blockages and lack of FOG dischargers or blockage “hot spots”, a FOG Control Program for the four enrolled parks is unnecessary at this time. Should any changes occur to any of the sewer systems facilities (e.g., installation of a food service or other facility that could contribute grease to the sewer system), the EBRPD would prepare and implement a FOG source control program as part of the SSMP to reduce the amount of these substances discharged to the appropriate sanitary sewer system.

VII-2: References

None.

Element VIII: System Evaluation and District Assurance Plan

System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- (a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- (b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- (c) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- (d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

VIII-1: System Evaluation – Collection System Master Plan

Sewer system laterals, gravity pipes, pump stations and force mains including all equipment and infrastructure at each of the enrolled parks was engineered and designed by professional engineers to accommodate and convey peak flows based upon planned uses and activities at each park. Currently there are no known capacity deficiencies in any of the four parks sewer systems. The park supervisors are knowledgeable of visitor capacities and respond accordingly when these capacities are approached. If, for any reason, any part of the sewer system must be shut down, park staff will bring in additional resources to continue public service. Should new demands upon park facilities occur that would necessitate additional sewer system infrastructure and equipment, such improvements or expansions will be professionally designed and engineered to meet expected demand.

VIII-2: Design Criteria

Each park has been designed by registered professional engineers for the adopted uses utilizing proper engineering design criteria for the uses proposed. Any changes to or additions of new uses would require an evaluation and design by a registered professional engineer and would include evaluation of the capacity and capability of the existing infrastructure to accommodate the new additions.

VIII-3: District Enhancement Measures – Capital Improvement Program

EBRPD is currently conducting a full CCTV condition assessment of each of the four enrolled parks sanitary sewer gravity system pipelines. This assessment is intended to include both a confirmation of all asset information as well as a full condition assessment of the current structural and maintenance condition of the pipelines. From this assessment, the staff will revise the current capital improvement program in Supplement IV-4 for each of the four sewer systems and will identify additional detailed projects for both short- and long-term capital needs for each park sewer system.

VIII-4: Schedule

The District's current capital improvement program included in Supplement IV-4 anticipates future annual expenditures on the sewer program from 2021 to 2030. The current list of projects will be further refined and the improvement schedule revised and priorities better defined following the completion of the current condition assessment program.

VIII-5: References

None.

Element IX: Monitoring, Measurement, and Program Modifications

Monitoring, Measurement, and Program Modifications:

The Enrollee shall:

- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- (c) Assess the success of the preventative maintenance program;
- (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- (e) Identify and illustrate SSO trends, including: frequency, location, and volume.

IX-1: Performance Measures

The indicators that EBRPD uses to measure the performance of its sanitary sewer collection system and the effectiveness of its SSMP for each of the four parks separately along with totals for the four parks annually are:

- Total number of sanitary sewer overflows (SSO) by enrolled park;
- SSOs by SWRCB overflow category
- Cause of each SSO (roots, grease, debris, structural, capacity, pump station failures, and other);
- Total overflow volume spilled annually
- Overflow volume recovered compared to total volume spilled;
- Volume of spilled sewage discharged to Waters of the United States; and
- Comparison of SSO Rate to State and RWQCB
- Average response time to an SSO.
- Annual linear feet of sewer cleaning.
- Annual linear feet of CCTV assessment.
- Backlog of repairs, rehabilitation and replacement projects.

IX-2: Baseline Performance

EBRPD has performance measures in place and will begin evaluating the above performance measures annually at the end of the fiscal year. The current sewer historical overflow performance is shown below starting in fiscal year 2007/08 through 2019/20. These performance results and the above new measures will be used to assist EBRPD in evaluating the effectiveness of the sewer collection system program as part of the biannual internal audit described in Element X.

Figure IX – 1: Overflows by Park by Fiscal Year

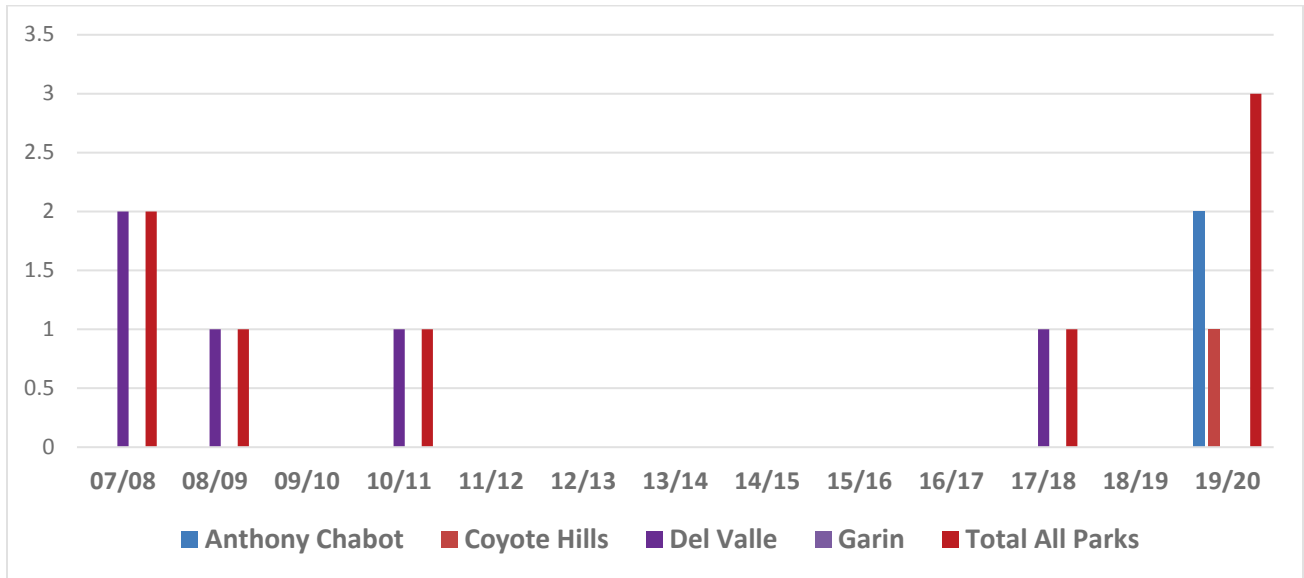


Figure IX – 2: Overflows by SWRCB Categories by Fiscal Year by Park Since 2007/08

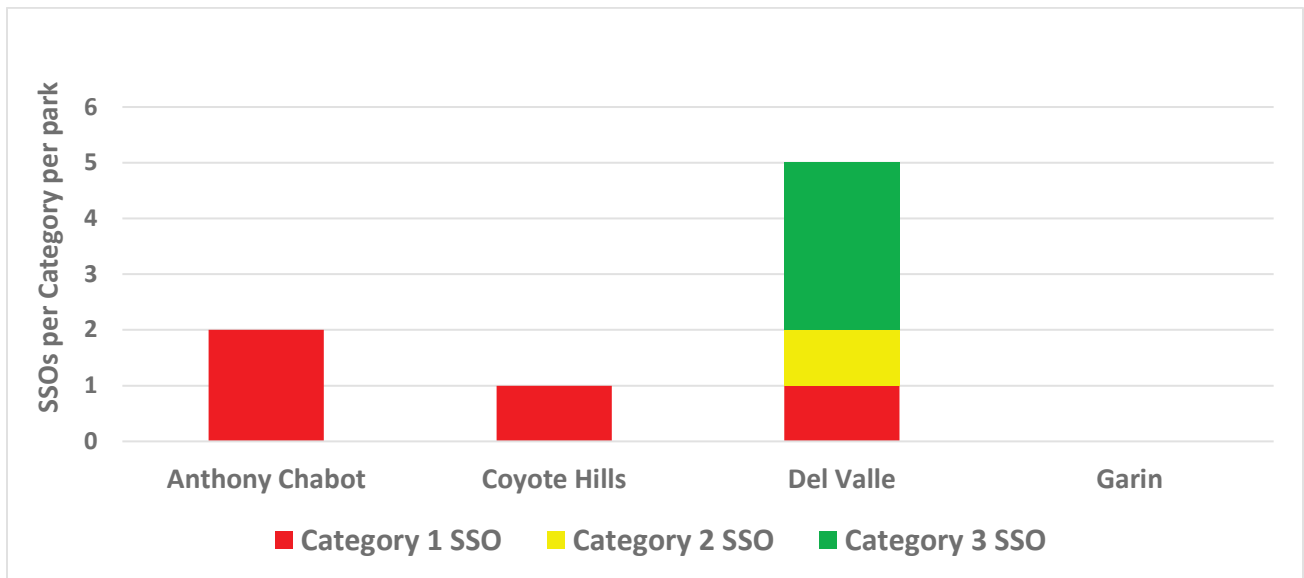


Figure IX – 3: Summary of Total Overflows by State Overflow Category 2007 to Current

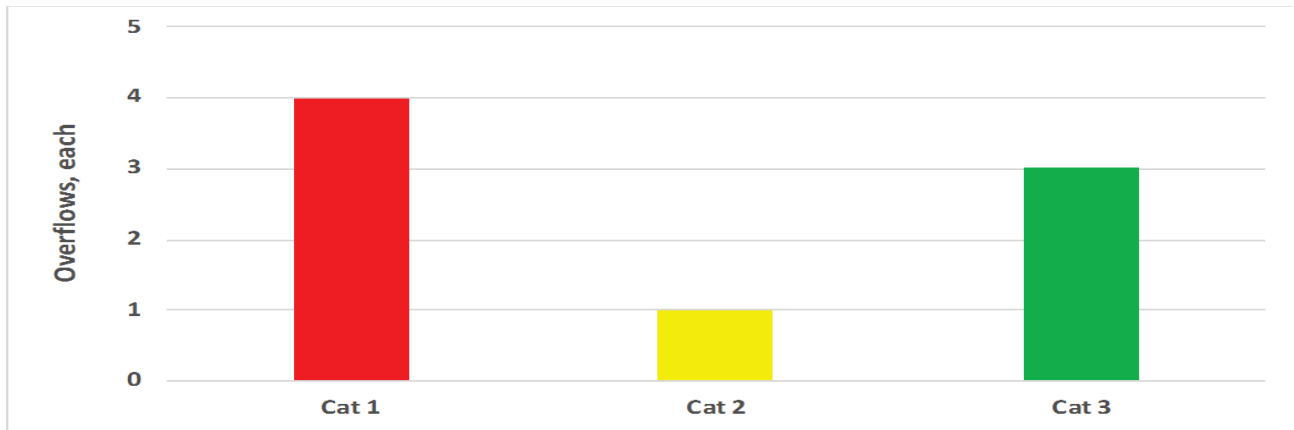


Figure IX – 4: Overflow Volumes by Park by Fiscal Year

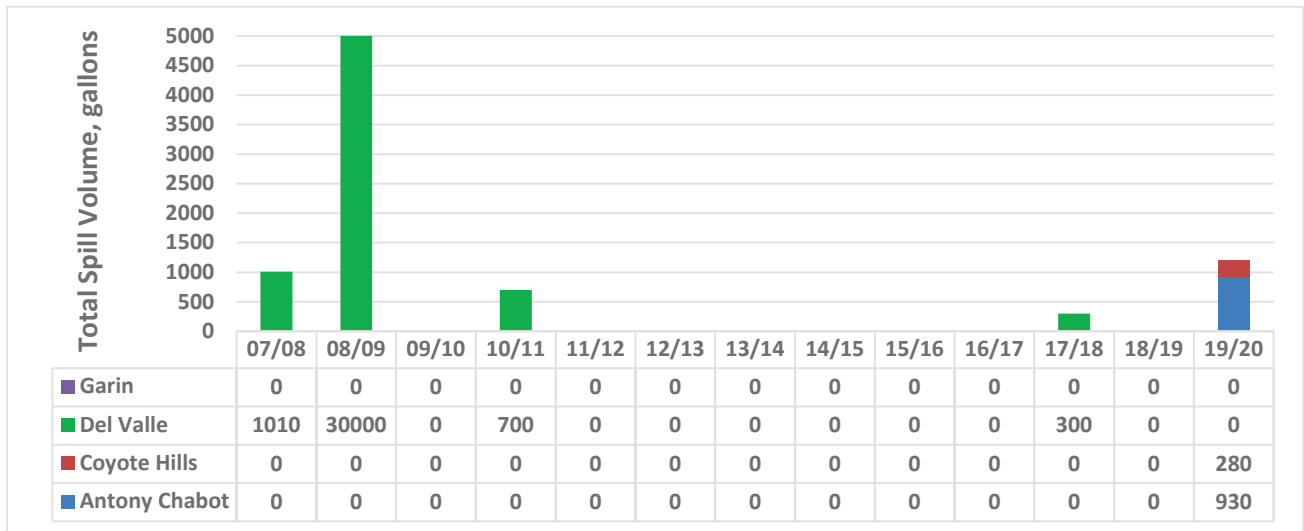
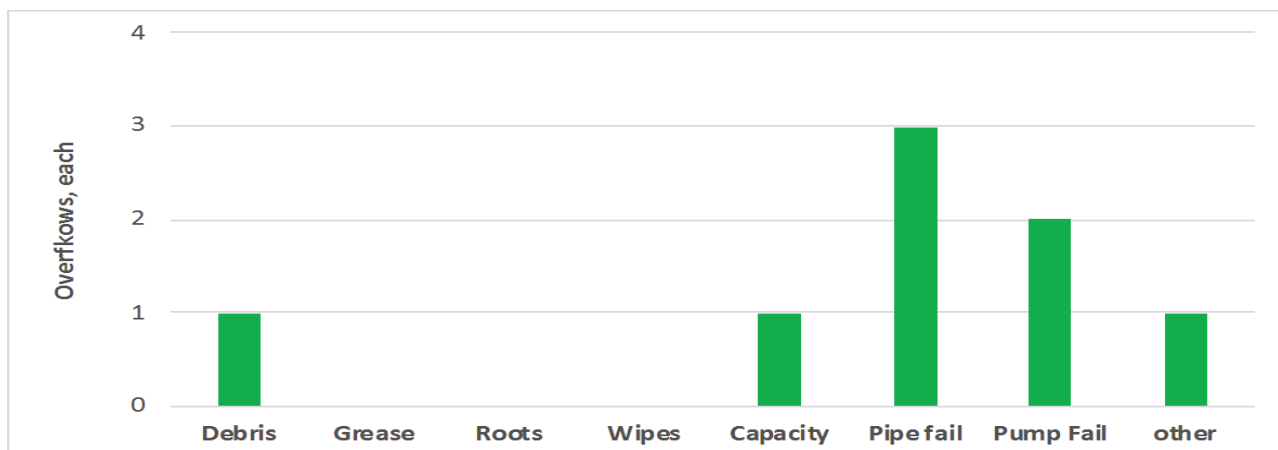


Figure IX – 5: Total Overflows by Cause since 2007/2008



IX-3: Performance Monitoring and Program Changes

EBRPD will compile the performance of its sewer collection system at least annually using the performance measures identified in this Element. EBRPD will update the data and analysis at the time of the annual evaluation and will place an Annual Performance Report on a Board agenda and after approval on the SSMP webpage.

EBRPD may use other performance measures in its evaluations. EBRPD will prioritize its actions and initiate changes to this SSMP, its operations and maintenance practices and procedures, and any related programs based on the results of these evaluations. This will be done as part of the biannual internal audit (see Element X).

IX-4: References

The data used in this section were taken from the following references:

- CIWQS SSO data as of June 2020 for each enrolled WDID.

Element X: SSMP Program Audits

SSMP Program Audits - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

X-1: Audits

EBRPD will audit the implementation and compliance with the provisions of the WDR and this SSMP every two years from the original adoption date of. Each enrolled park as required by the WDR. All four parks were enrolled in June 2012. The next audit will be conducted and completed no later than November 2022. The audit will be conducted by a team consisting of District Staff selected Operations, MAST and Stewardship. The audit team may also include members from other agencies like USD, CVSD or Hayward or professional consultants. During the SSMP audit, EBRPD will conduct a record keeping audit of its SSO files supporting the CIWQS certified reports during the audit period to assure that these the files are complete, contain all required records and documentation as stated in the MRP and OERP and that the files contain no extraneous or conflicting records or information.

The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them will be included in a separate LRO certified Internal Audit Report Action Plan. Upon completion of the audit report and certification by the LRO, EBRPD will place a copy of the final Audit Report in **Appendix C, Sewer System Annual Audit Reports of the SSMP**. Modifications and changes to the SSMP identified during the audit will be identified in **Appendix D, SSMP Change Log** when completed.

The audit should contain information about successes in implementing the most recent version of the SSMP and identify revisions that may be needed for a continuously improving and effective program. Information collected will be used in preparing the Audit Report. Tables and figures or charts will be used to summarize information regarding results of performance. An explanation of the SSMP implementation, accomplishments in improving the sewer system, in addition to the following:

- How EBRPD implemented the sewer system SSMP elements in the past two years;
- The effectiveness of implementing each SSMP element;
- A description of the additions and improvements made to the sanitary sewer collection system in the audit period;

- A description of the additions and improvements planned for the upcoming reporting period with an estimated schedule for implementation.
- Status of any deficiencies or corrective actions identified to improve program performance.

X-2: SSMP Updates

EBRPD Board will recertify its SSMP at least every five years from original District Board adoption date of June 6, 2012 or when substantial changes are made to the sewer program or the SSMP. EBRPD will determine the need to update its SSMP more frequently based on the results of the audits and the performance of its sanitary sewer collection system using information from the Monitoring and Measuring Program Element IX. In the event EBRPD decides that an update is warranted, the process to complete the update will be identified. EBRPD will complete the update and take the revisions to Board within one year of identifying the need for an update.

X-3: References

None.

Element XI: Communication Program

Communication Program – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee’s sanitary sewer system.

XI-1: Communication during SSMP Development and Implementation

The District does not currently have a formal communication plan in place for the communication of SSMP elements, performance, or updates. The District will post the Board approved and adopted SSMPs on the District website. A clear link to the document will be provided on the website to facilitate access to the document. In addition, a hyperlink to the State of California database will also be available from the District SSMP webpage for ease of contacting and understanding the EBRPD performance for each of the four enrolled parks.

The District’s Board of Directors will be involved with the approval process of its SSMPs at its Board Meeting(s). In advance of such approval, personnel from MAST and the Stewardship Department will be preparing a Report to the Board that provides background information including regulatory drivers for SSMP development, and the SSMP implementation schedule. The report to the Board will be made available to the general public through posting on the District web page. All Board meeting are open to the public and includes a period for public comment.

XI-2: Communication with Regional Sewage Collection Agencies

EBRPD regularly communicates with the agencies (CVSD, Hayward, USD) that they discharge to regarding issues and conditions related to the continuing discharge of District sewage to those systems. These contacts are documented with agendas and minutes from each meeting.

XI-3: References

None.