

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Elizabeth Christian)  
MEETING DATE: July 10, 2019

ITEM: **5B**

SUBJECT: **City of Suisun City, Pierce Island Dredged Material Disposal Site, Solano County** –Reissued Waste Discharge Requirements and Rescission of Order No. 90-071

CHRONOLOGY: May 1990 – Waste Discharge Requirements (WDRs) adopted

DISCUSSION: The Tentative Order (Appendix A) would update WDRs that regulate the City of Suisun City's (City's) operation of a dredge disposal site. The City periodically disposes of hydraulically dredged sediment from the Suisun City Marina, Marina Village Residential District, and associated navigation access channels in or adjacent to the northern terminus of Suisun Slough.

The Tentative Order would rescind and update the 1990 order as follows:

- Revises the decant water discharge effluent limits and the corresponding Self-Monitoring Program attached to this Order to reflect updates to Basin Plan water quality objectives made after 1990.
- Revises the site description and mitigation requirements related to temporal impacts of dredged material disposal to seasonal and non-tidal wetlands in and adjacent to listed species habitat to conform to mitigation required by California Department of Fish and Wildlife.

Staff recognizes that the Pierce Island Dredged Material Disposal Site will be near capacity after the 2019 dredging cycle. Provision 2 of the Tentative Order requires the City to submit a Site Operation, Management, and Maintenance Plan (Plan) to guide the continued use of the Site for dredged material disposal. Staff review of the Plan will take into consideration consistency with the [State of California Sea-Level Rise Guidance](#) (Ocean Protection Committee, 2018 Update) and the [San Francisco Bay Shoreline Adaptation Atlas](#) (San Francisco Estuary Institute, Publication #915, April 2019).

We posted the Tentative Order to our website for 30 days as well as circulating it to the City, other responsible agencies, and interested parties. We did not receive any comments.

RECOMMEN-  
DATION: Adoption of the Tentative Order

CIWQS Place: 259346

APPENDICES: A. Tentative Order

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**APPENDIX A**  
**Tentative Order**

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# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

## TENTATIVE ORDER

### REISSUED WASTE DISCHARGE REQUIREMENTS and RESCISSION OF ORDER NO. 90-071 for:

#### CITY OF SUISUN CITY PIERCE ISLAND DREDGED MATERIAL DISPOSAL SITE, SOLANO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), finds that:

#### 1. **Purpose of Order**

This Order applies to the City of Suisun City's (City) operation of the Pierce Island Dredged Material Disposal Site (Site) currently used for disposal of hydraulically dredged sediment from Suisun City Marina, the Marina Village Residential District, and associated navigation access channels in or adjacent to the northern terminus of Suisun Slough (Figures 1 and 2). The City owns and operates the Site and is the discharger. Its disposal activities at the Site have been authorized under waste discharge requirements Order No. 90-071. This Order updates Order No. 90-071 as follows:

- a. Revises the decant water discharge effluent limits and the corresponding Self-Monitoring Program attached to this Order to reflect updates to Basin Plan water quality objectives made after 1990.
- b. Revises the site description and the mitigation requirements related to temporal impacts of dredged material disposal to seasonal and non-tidal wetlands in and adjacent to listed species habitat.

#### 2. **Site Description and History**

Originally part of the City mainland, Pierce Island was created in 1962 by the U.S. Army Corps of Engineers (USACE) when it dredged the Suisun Slough Channel and used the dredged material to construct the original island levee system. The island was used for cattle-grazing until the Fairfield/Suisun Sewer District purchased it for use as wastewater oxidation ponds. In 1976, wastewater was re-routed to the Fairfield-Suisun sub-regional treatment facility and oxidation pond operations ceased. USACE used the island for disposal of dredged material from Suisun Slough Channel from 1981 to 1992. The Suisun Slough Channel has not been part of the USACE's dredging program since 1992. The City used the Site for disposal of dredged sediment from the Suisun City Marina and associated channels in 1999, 2002, and 2008.

In 1990, the City proposed redeveloping two of five former wastewater oxidation ponds on Pierce Island for long-term dredged material disposal. At the time, a total of 37 acres of seasonal wetlands, as determined by USACE, existed on Pierce

Island within portions of the ponds and in scattered areas around the island’s perimeter. The island was partitioned to provide 35 acres for dredged material disposal (the East Pond and West Pond, which compose the Site) and 37 acres for wetland habitat. To achieve no net loss of wetland acreage, the City restored non-wetland areas (levees and uplands) around the perimeters of the East and West Ponds to tidal influence. The perimeter levees were removed and replaced with interior levees separating the two ponds from each other and from the tidally-influenced freshwater emergent wetland that currently surrounds the island. The levees were constructed to elevation +16.5 feet relative to the North American Vertical Datum of 1988 (NAVD88) to contain approximately 600,000 cubic yards (cy) of dredged sediment. Approximately 412,600 cy of dredged sediment has been disposed of at the Site since 1992.

In August and September 2018, the City rehabilitated and raised the subsided East Pond perimeter and center levee crests back to their original permitted elevation as allowed per Order 90-071 to accommodate the next maintenance dredging episode in the Suisun City Marina and adjacent channels, expected to take place in the late summer and fall of 2019. Dried dredged sediment that was placed within the East Pond during previous maintenance dredging events was mechanically excavated and used to raise levee elevations. No work was performed on the West Pond perimeter levee, and the lowest crest elevations remain at approximately +11.5 feet NAVD88. Current capacity for dredged sediment disposal is approximately 176,600 cy, assuming two feet of ponded water on top of the sediment and two feet of freeboard, as summarized in the following table.

**Disposal Site Capacity**

<b>Disposal Pond</b>	<b>Surface Area (acres)</b>	<b>Capacity (cy)</b>
West Pond	21.9	75,600
East Pond	14.1	101,000
<b>Total Capacity</b>	36.0	176,600
2019 Disposal Volume Estimate	--	(158,800)
Remaining Capacity	--	17,800

The total volume of sediment that the City proposes to dredge within the next ten years is approximately 317,600 cy (158,800 cy 2019 and 158,800 cy in the next dredging cycle approximately eight to nine years later). Given the anticipated volume per dredging episode, the Site will likely run out of capacity to accommodate disposal from another dredging cycle after 2019 unless additional capacity is created. Additional capacity could be created by raising the subsided West Pond perimeter levee back to its original permitted elevation and/or removing dried dredged sediment from one or both pond bottoms and beneficially reusing or disposing of this sediment offsite. Provision 2 requires the City to submit a Site Operation, Management, and Maintenance Plan to guide the continued use of the Site for dredged material disposal.

As part of the East Pond levee rehabilitation in 2018, the existing weir structures and outfall culverts were either repaired or demolished and plugged. A new weir structure and outfall culvert was constructed in the East Pond, along the north levee,

to allow for the East Pond to decant into Whispering Bay Connecting Channel (Figure 3). In addition, a 4-acre salt marsh harvest mouse (SMHM, *Reithrodontomys raviventris*) preserve was constructed in the southern portion of the East Pond under a permit issued to the City by the California Department of Fish and Wildlife (CDFW), as discussed in Finding 4.

### 3. Site Operations

Hydraulically dredged sediment from the Suisun City Marina and associated navigation channels will be pumped as a slurry mixture of approximately 15 percent solids and 85 percent water into the West Pond, from which it will decant through a connection conduit into the East Pond. Once the West Pond has reached capacity, the connection conduit will be sealed, and the dredge slurry will be pumped into the East Pond. After the suspended sediment has settled and the clarified decant water meets the Effluent Limits in this Order, the decant water will be discharged to the Whispering Bay Connecting Channel through an overflow weir at the northern end of the East Pond. A minimum two feet of freeboard will be maintained in both ponds during dredged material placement and decanting.

### 4. Impacts and Mitigation

In 2016, the City conducted a preliminary biological assessment to document the existing biological resources on Pierce Island including habitat for or presence of special-status plant and animal species. The biological assessment concluded that the Site provides habitat for the SMHM. The East and West Ponds become seasonally inundated during the winter forming non-tidal, saline emergent wetlands (salt marsh) that gradually dry through the spring and summer. These wetland areas are dominated by pickleweed and other salt-tolerant plant species that collectively provide approximately 14 acres of potentially suitable SMHM habitat. Continued use of the Site for dredged material disposal is likely to temporarily alter its suitability as SMHM habitat.

On June 26, 2018, CDFW issued a Lake or Streambed Alteration Agreement (SAA # 1600-2017-0312-R3) to the City requiring implementation of specific avoidance and minimization measures to protect wetland portions of the Site and any special-status species present from adverse impacts related to Site operations. The SAA also required submittal of a mitigation plan to address ongoing temporary impacts to 10 acres of non-tidal salt marsh habitat. The "Pierce Island Levee Construction and Dredge Disposal Project Restoration and Mitigation Plan" dated July 30, 2018 (Mitigation Plan), includes the following actions:

- To mitigate for the loss of SMHM habitat due to dredged material placement and/or levee maintenance activities and to provide on-site refugia for SMHM during these activities, approximately four acres of salt marsh habitat in the southern portion of the East Pond have been set aside as a permanent habitat preserve for SMHM (Figures 2 and 3). A cross levee was constructed during the summer of 2018 to separate this preserve from the disposal pond, preventing dredged material from entering and impacting the preserve.

Restoration of salt marsh vegetation in sediment-filled disposal ponds after water decants and is released. If vegetation does not establish passively within six months of completion of dredged sediment placement, active revegetation will occur over a

10-acre area within the ponds determined to be most conducive to pickleweed-dominated and mixed-pickleweed habitat restoration.

**5. Antidegradation Policy**

CFR Title 40, part 131.12, requires that state water quality standards include an anti-degradation policy consistent with federal policy. The State Water Resources Control Board (State Water Board) established California's anti-degradation policy through State Water Board Resolution 68-16, which incorporates the federal anti-degradation policy where the federal policy applies. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. This Order complies with the anti-degradation policy by prohibiting degradation of existing water quality onsite and near site operations by requiring compensatory mitigation for temporary impacts to 10 acres of non-tidal salt marsh habitat per the Mitigation Plan referenced in Specification 3.

**6. San Francisco Bay Basin Water Quality Control Plan (Basin Plan)**

California Water Code section 13240 authorizes the Water Board to develop a Water Quality Control Plan for the San Francisco Bay Basin, which is the Water Board's master water quality control planning document (Basin Plan). The Basin Plan designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan was duly adopted by the Water Board and approved by the State Water Board, U.S. EPA, and the Office of Administrative Law where required. The latest version can be found on the Water Board's website at [http://www.waterboards.ca.gov/sanfranciscobay/basin\\_planning.shtml](http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml). Requirements in this Order implement the Basin Plan.

7. The existing and potential beneficial uses of Suisun Slough and contiguous waters, as set forth in the Basin Plan, are as follows:

- a. Commercial fishing
- b. Estuarine habitat
- c. Fish migration
- d. Preservation of rare and endangered species
- e. Fish spawning
- f. Warm freshwater habitat
- g. Wildlife habitat
- h. Water contact recreation
- i. Non-contact water recreation
- j. Navigation

**8. California Environmental Quality Act (CEQA)**

The project constitutes the continued operation of a previously authorized disposal site that involves no expansion of use. It is, therefore, categorically exempt from review



under CEQA pursuant to Section 15301, Existing Facilities – Class 1, of the CEQA Guidelines. The Water Board will file a Notice of Exemption with the State Clearinghouse within five working days from the issuance of this Order (California Code of Regulations (CCR), title 14, section 15062).

9. Any requirement for a report made as a condition to this Order is a formal requirement pursuant to CWC section 13267, and failure or refusal to provide, or falsification of such required report, is subject to civil liability as described in CWC section 13268. The burden, including costs, of these reports bears a reasonable relationship to the need for the report and the benefits to be obtained.
10. The Regional Water Board has notified the City and interested agencies and persons of its intent to prescribe waste discharge requirements and has provided them with an opportunity to submit their written comments. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code (CWC) and regulations adopted thereunder, that the City shall comply with the following:

#### **A. PROHIBITIONS**

1. Discharge of any waste other than sediment dredged from the Suisun City Marina, the Marina Village Residential District, and associated navigation access channels in or adjacent to the northern terminus of Suisun Slough is prohibited.
2. The direct discharge of dredged sediment in quantities sufficient to cause deleterious bottom deposits or turbidity or discoloration greater than natural background levels in surface waters is prohibited.
3. The discharge shall not cause degradation of any water supply.
4. At no point within the Site shall the elevation of dredged sediment exceed that of the containment levees.
5. This Order does not allow for the take, or incidental take, of any special status species. The City shall use appropriate protocols, as approved by CDFW, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service, to ensure that dredge disposal activities do not adversely impact the Preservation of Rare and Endangered Species beneficial use of Suisun Slough and its tributaries.
6. The activities subject to this Order shall not cause a condition of pollution or nuisance as defined in CWC sections 13050 (l) and (m), respectively.

## **B. SPECIFICATIONS**

### **1. Dredged Material Screening Procedures**

The City shall submit data characterizing the quality of all dredged material proposed for disposal at the Site. Review of the data shall be coordinated through the Dredged Material Management Office (DMMO), which reviews sediment quality testing data for navigational dredging projects and determines the suitability of dredged material for various disposal or beneficial reuse sites. The objective of the sediment testing requirements is to ensure that disposal or beneficial reuse of dredged material occurs without causing degradation to the surrounding environment. The sediment is typically characterized by testing for physical attributes (e.g., grain size), chemical pollutants, and the potential for biological toxicity.

Sediment characterization shall follow the technical guidance and protocols specified in the DMMO guidance document, "[Guidelines for Implementing the Inland Testing Manual in the San Francisco Bay Region](#)" (Corps Public Notice 01-01, or most current version), with two exceptions: 1) replace the standard water column bioassay with the modified effluent elutriate test (MET), as described in Attachment B of the Inland Testing Manual, for water column toxicity and metals chemistry; and 2) omit the benthic acute toxicity bioassay.

### **2. Dredged Material Acceptance Criteria**

The numeric acceptance criteria in the following table shall be used to screen sediment for disposal at the Site. In addition, the MET shall not exhibit any significant water column toxicity. The Water Board may grant exceptions if the City submits a technical report demonstrating that dredged material disposal at the Site is unlikely to adversely impact beneficial uses. The basis for granting exceptions includes but is not limited to 1) site-specific conditions affecting the physical and chemical fate and transport of contaminants of concern; 2) the potential for exposure of these contaminants to ecological receptors; and 3) the degree of bioavailability and potential for biological uptake of these contaminants by ecological receptors.

Constituent	Sediment Concentration <sup>1</sup>	MET Concentration <sup>2,3</sup>
<b><i>Metals (mg/kg)</i></b>		
Arsenic	15.3	36
Cadmium	0.33	1.1
Chromium	112	50
Copper	68.1	6.0
Lead	43.2	8.1
Mercury	0.43	0.025
Nickel	112	8.2
Selenium	0.64	5.0
Silver	0.58	1.9
Zinc	158	81
<b><i>Organochlorine Pesticides, PCBs, &amp; PAHs (µg/kg)</i></b>		
DDTs, sum	7.0	NA
Chlordanes, sum	2.3	NA
Dieldrin	0.72	NA
Hexachlorocyclohexane, sum	0.78	NA
Hexachlorobenzene	0.485	NA
Total PCBs (sum of RMP 40 congeners)	22.7	NA
Total PAHs (sum of RMP 25 compounds)	3,390	NA

Notes:

- <sup>1</sup> Technical basis for these numbers is described in the Regional Water Board May 2000 staff summary report, [“Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines”](#)
- <sup>2</sup> Based on the more stringent of the Basin Plan marine and freshwater chronic toxicity-based water quality objectives for toxic pollutants
- <sup>3</sup> Expressed in terms of the dissolved fraction of the metal in the water column, except for mercury & selenium which are expressed in terms of the total fraction

**3. Mitigation**

To mitigate for 10 acres of temporary impacts to non-tidal salt marsh habitat, the City shall restore all areas of temporary impacts to waters of the State and all upland areas temporarily impacted that could result in a discharge to waters of the State in accordance with the Mitigation Plan, incorporated herein by reference.

4. Prior to completion of the decanting process, the top of the dredged sediment slurry shall be maintained at least two feet below the top of the containment levees.
5. The Site shall be operated to prevent the inundation, washout, or erosion of stored sediments that could occur during a storm event.
6. All decant water resulting from dredged sediment placed within the disposal ponds shall be contained within the pond levees and allowed to evaporate, or it shall be demonstrated to meet the effluent limits in Table C.1 prior to discharge.

**C. EFFLUENT LIMITS**

1. All dredged material decant water discharges from the Site shall not exceed the following limits:

<b>Conventional Pollutants Constituent</b>	<b>Unit</b>	<b>Minimum</b>	<b>Maximum</b>
a. Total Suspended Solids (TSS)	mg/L		100
b. Dissolved Oxygen (D.O.)	mg/L	3.8 <sup>1</sup>	
c. pH	pH	6.5	8.5

Notes

<sup>1</sup> Basin Plan Acute objective (daily average). If decant discharge occurs for 30 or more consecutive days, the Basin Plan chronic objective of 5.0 mg/L minimum (30-day running average) also applies.

**D. PROVISIONS**

**1. Decant Discharge Monitoring and Reporting**

The City shall comply with the Self-Monitoring and Reporting Program (SMP) attached to this Order and as may be amended by the Executive Officer. By the 30<sup>th</sup> day of each month following a month in which dredged material decant discharge occurred, the City shall submit a report to the Regional Water Board covering the previous month’s activities. The reports shall reference CIWQS Place ID 259346 and may be submitted to the Water Board staff case manager via email or by uploading to the Water Board’s FTP site.

**2. Operation, Management and Maintenance Plan**

The City shall submit, by June 30, 2020, an Operation, Management and Maintenance Plan to guide the continued use of the Site for dredged material disposal. At a minimum the plan shall include, but not be limited to, the following elements: 1) the City’s process and schedule for addressing dredged material disposal capacity given that the Site will be near capacity after the 2019 dredging cycle; 2) levee integrity inspection and maintenance; 3) wetland habitat management after completion of mitigation for 2019 dredged material disposal; and 4) mosquito source abatement. The plan shall reference CIWQS Place ID 259346 and may be submitted to the Water Board staff case manager via email or by uploading to the Water Board’s FTP site.

**3. Mitigation Monitoring and Reporting**

As specified in the Mitigation Plan referenced in Specification 3, the City shall perform mitigation monitoring and submit a mitigation monitoring report annually to the Water Board staff case manager by March 1 of each year following dredged material disposal until the goal of restoring 10 acres of temporarily-impacted SMHM habitat is accomplished. The annual reports shall reference CIWQS Place ID 259346 and may be submitted via email, or by uploading to the Water Board’s FTP site.

If progress towards meeting final performance criteria falls short of the timeline in the Mitigation Plan, the City shall, in consultation with the appropriate agencies, identify and implement remedial measures to be undertaken, including extension of the monitoring and reporting period until the criteria are met.

Within 30 days of successfully establishing the compensatory mitigation, the City shall submit, acceptable to the Water Board Executive Officer, a Notice of Mitigation Monitoring Completion. The Notice shall be submitted via email to the Water Board staff case manager and shall include the date compensatory mitigation was completed, the Project Name, and reference CIWQS Place ID 259346.

**4. Contingency and Corrective Action Reporting**

A report to the Regional Water Board case manager shall be made by telephone and email of any accidental discharge or adverse condition immediately after it is discovered. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this Order, a significant spill of petroleum products or toxic chemicals, or other events that could affect compliance. A written report shall be filed with the Regional Water Board within fifteen days thereafter. This report shall contain the following information:

- a. A qualitative description of the discharge(s) and the circumstances leading to the discharge(s), including date and time of discharge(s), weather conditions and tide stage (flood, ebb, or slack);
  - b. A map showing the location(s) of discharge(s);
  - c. Approximate flow rate and estimated volume of the discharge(s);
  - d. Laboratory results if, based on the initial notification and nature of the accidental discharge, the Regional Water Board case manager requests sampling and analysis for particular pollutants potentially discharged; and
  - e. Corrective measures underway or proposed.
5. The City shall maintain all devices or design features installed in accordance with this Order, such that they continue to operate as intended without interruption, except as a result of failures that could not have been reasonably foreseen or prevented by the City.
6. The City shall permit the Regional Water Board or its authorized representative, upon presentation of credentials:
- a. Entry upon the premises on which wastes are located or in which any required records are kept;
  - b. Access to copy any records required to be kept under the terms and conditions of this Order; and
  - c. Sampling of any discharge covered by this Order.
7. The City shall adhere to the conditions imposed by CDFW in the Lake or Streambed Alteration Agreement (Notification No. 1600-2017-0312-R3) issued for the Site.

8. This Order does not authorize commission of any act causing injury to the property of another or of the public; does not convey any property rights; does not remove liability under federal, State or local laws; and does not authorize the discharge of wastes without appropriate permits from other agencies.
9. The Regional Water Board may modify, or revoke and reissue, this Order if present or future investigations demonstrate that the discharges governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality or beneficial uses of the receiving waters.
10. This Order supersedes Order No. 90-071. Order No. 90-071 is hereby rescinded, except for enforcement purposes.

I, Michael Montgomery, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 10, 2019.

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Michael Montgomery  
Executive Officer

Attachments:

- Figure 1 – Location Map
- Figure 2 – Vicinity map
- Figure 3 – Site Plan

A: Self-Monitoring Program (SMP)

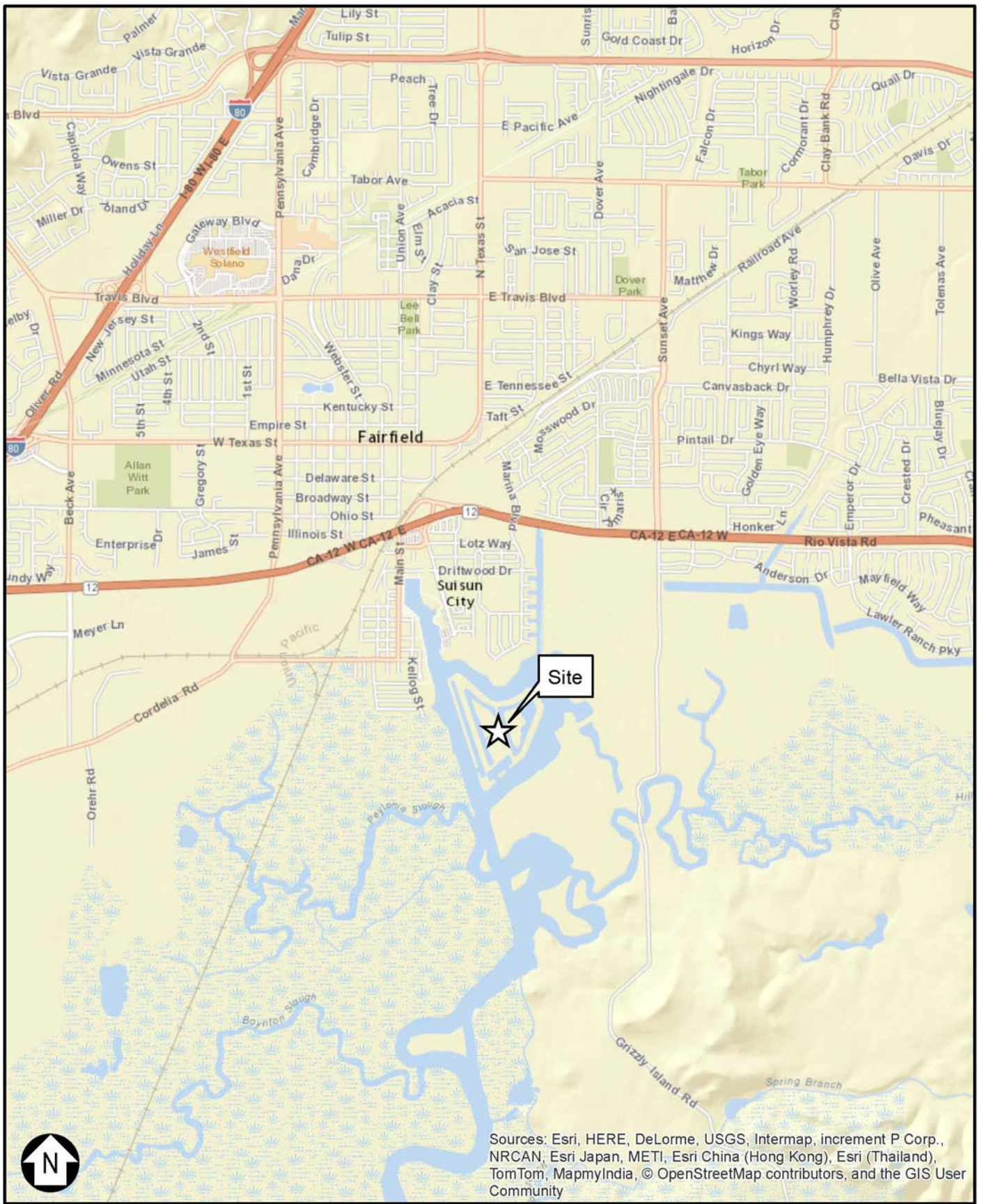


Figure 1. Location Map

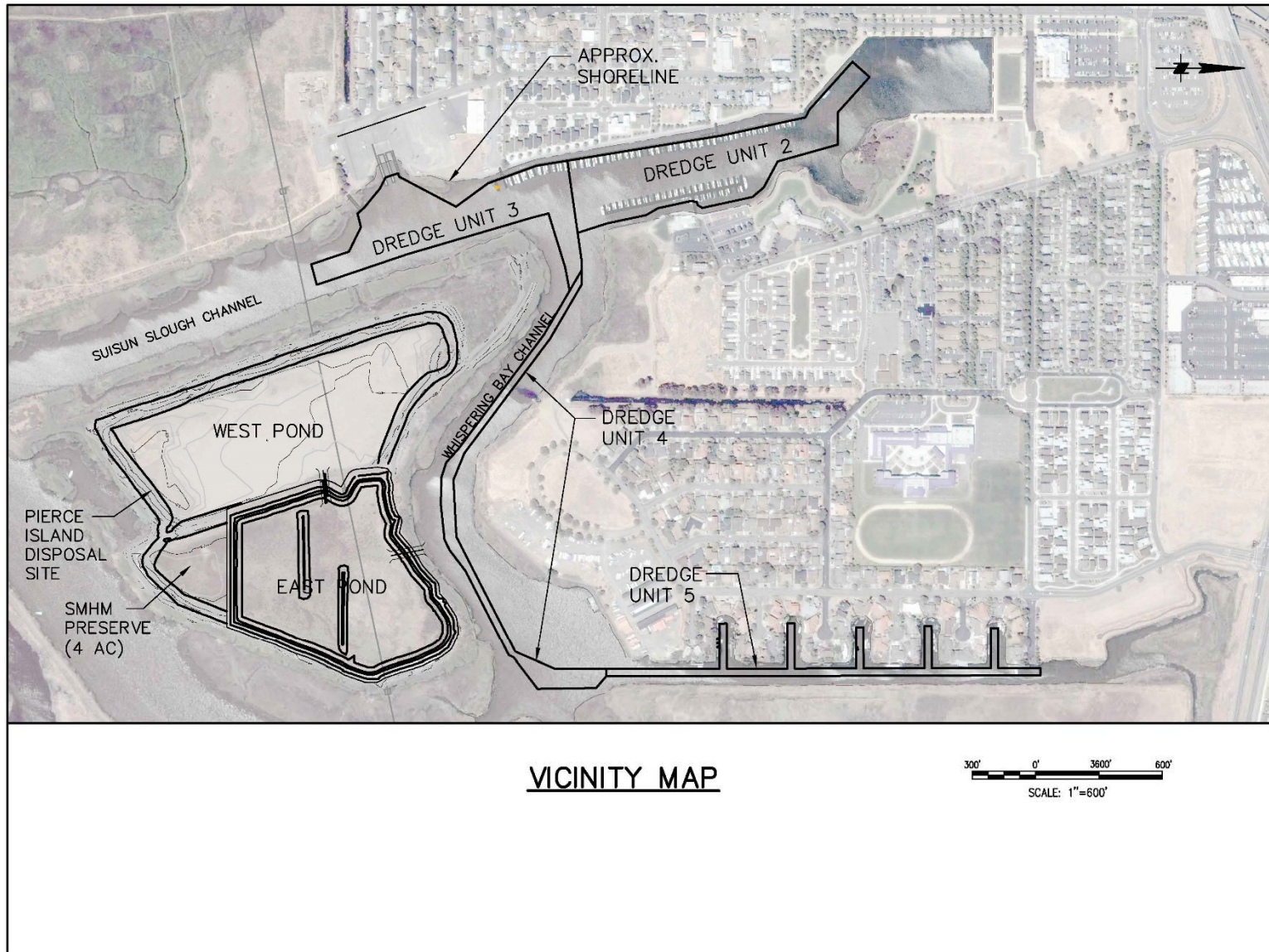


Figure 2. Vicinity Map



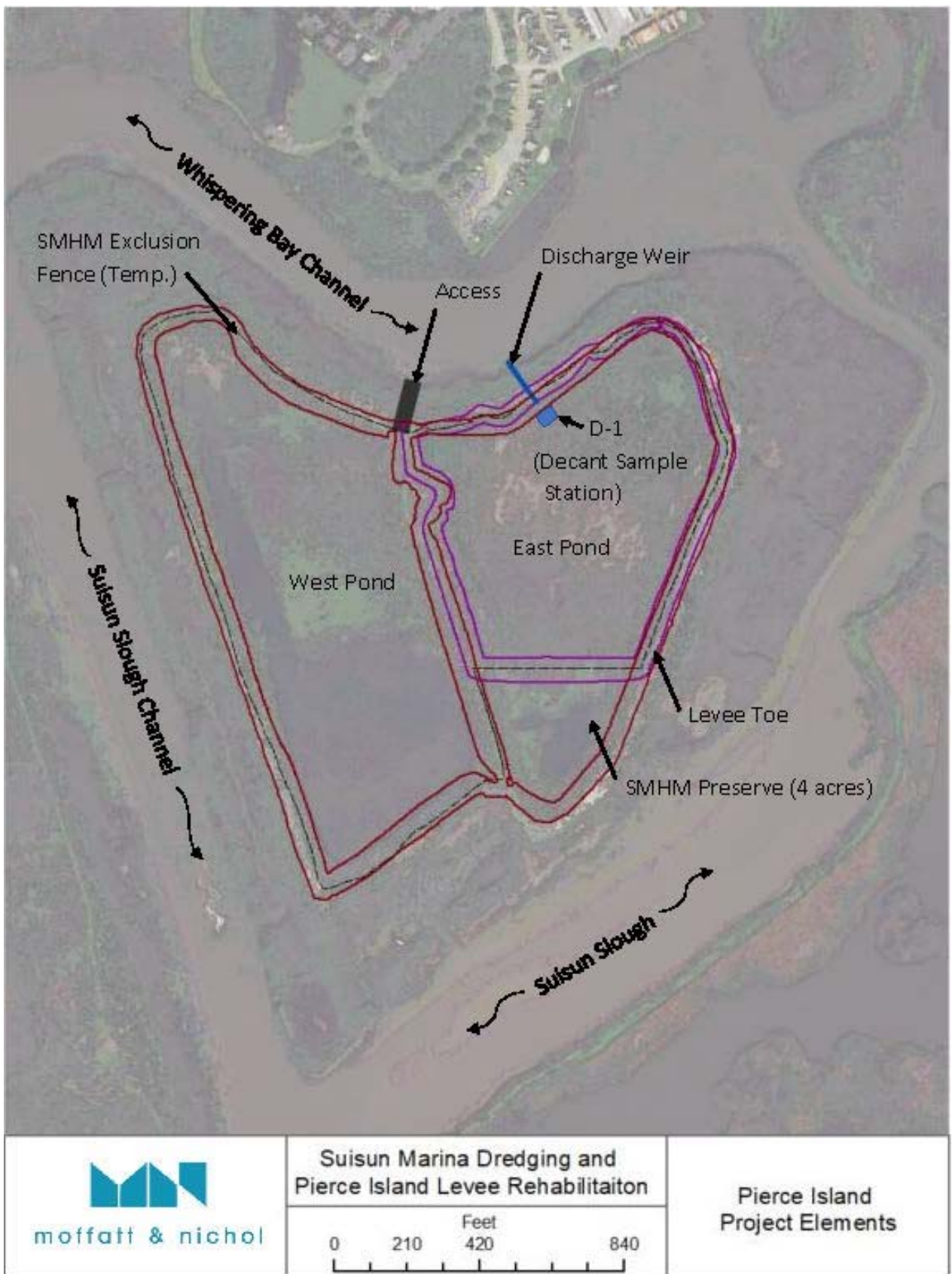


Figure 3. Site Plan

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ATTACHMENT A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CITY OF SUISUN CITY

PIERCE ISLAND DREDGED MATERIAL DISPOSAL SITE

ORDER No. R2-2019-XXXX

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## A. GENERAL

1. Reporting responsibilities of waste dischargers are addressed in section 13267(b) of the California Water Code (Water Code) and in the Regional Water Board's Resolution No. 73-16.
2. The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by the Regional Water Board, and (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

## B. SAMPLING AND ANALYTICAL METHODS

1. Sample collection, storage, and analyses shall be performed according to Code of Federal Regulations title 40, section 136, or other methods approved and specified by the Executive Officer of the Regional Water Board.
2. Water analyses shall be performed by a laboratory approved for these analyses by the State of California's Environmental Laboratory Accreditation Program administered by the State Water Board.
3. The director of the laboratory whose name appears on the certification, or his/her laboratory supervisor who is directly responsible for the analytical work performed, shall supervise all analytical work including appropriate quality assurance/quality control procedures in his/her laboratory and shall sign all reports of such work submitted to the Regional Water Board.
4. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

## C. DEFINITION OF TERMS

1. A **grab sample** is defined as an individual sample collected in a short period of time not exceeding 15 minutes. It is used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the wastewater is collected.
2. A **discharge event** consists of dredged material decant effluent discharge that does not cease for more than 7 consecutive days. If discharge stops for more than 7 consecutive days and then starts up again, the date of start-up becomes the beginning of a new discharge event for monitoring purposes.
3. **Receiving waters** refers to any water body that actually receives or potentially could receive surface or groundwater that passes over, through, or under dredged sediment during placement, dewatering, and settling/consolidation activities. For discharge episode monitoring, the receiving waters are the two arms of Suisun Slough adjacent to the east and west perimeters of Pierce Island

and the Whispering Bay Connecting Channel that runs along the norther perimeter (Figures 2 and 3 of Order R2-2019-XXXX).

4. **Receiving Waters Standard Observations** refer to:
  - a. Evidence of floating and suspended materials generated by project activities, as recorded by visual observations.
  - b. Discoloration and turbidity: description of color, source, and size of affected area.
  - c. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
  
5. **Site Standard Observations** refer to visual inspection of:
  - a. Overall condition and integrity of the disposal pond containment levees.
  - b. Location of placed material, amount of freeboard available, and whether any discharge of dredged sediments outside of the containment levees has occurred.
  - c. Overall condition and integrity of the decant effluent discharge weirs and discharge outfall pipelines.

#### **D. SPECIFICATIONS FOR SAMPLING AND ANALYSES**

The City shall perform sampling and analyses according to the schedule in **Table 1** and the following conditions:

1. Decant Effluent Discharges
  - a. If analytical results are received showing any daily limit is exceeded for any conventional pollutant, a confirmation sample shall be taken within 24 hours and the results shall be known within 24 hours of the sampling.
  - b. If any minimum or maximum limit for a constituent is exceeded in the confirmation sample(s), then the preliminary confirmation results shall be reported immediately to the Regional Water Board case manager via email and the discharge shall be restricted to the extent practical, until the cause of the violation can be found and corrected. Within five days of the discharge limit exceedance, the City shall submit a contingency report as described in section H.
  - c. For other violations, the City shall implement procedures that are acceptable to the Executive Officer on a case by case basis.

#### **E. DESCRIPTION OF SAMPLING STATIONS**

1. Decant Water

D-1: Samples shall be taken at the inboard side of final decant effluent weir shown in Figure 3 of Order R2-2019-XXXX.

## **F. RECORDS TO BE MAINTAINED**

Written reports shall be maintained by the City or its laboratory and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board. Such records shall show the following for each sample:

1. Identity of the sample and GPS coordinates;
2. Date and time of sampling and the name of the person performing the sampling;
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses;
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
5. Calculation of results; and
6. Results of analyses, and detection limits for each analysis.

## **G. REPORTING REQUIREMENTS**

By the 30<sup>th</sup> day of each month that follows a month in which discharge occurred, the City shall submit a report to the Regional Water Board covering the previous month's activities. The City shall provide an electronic copy to Regional Water Board staff via email or FTP site.

Each monthly report shall contain the following:

1. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any Waste Discharge Requirement violations found during the last report period and actions taken or planned for correcting the violations. If the City has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last annual report period, this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by the City's duly authorized representative responsible for the overall operation of the facilities from which the discharges originate. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

2. A map or aerial photograph showing observation and monitoring stations.
3. Tabular and graphical summaries of the monitoring data obtained during the previous year.
4. A description of the compliance record and any corrective actions taken or planned that may be needed to bring the City into full compliance with the Waste Discharge Requirements.
5. Laboratory statements of results of analyses specified in Table 1

The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

- a. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than U.S. EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approval by the Executive Officer.
- b. In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment, and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than the recovery acceptance limits specified in the U.S. EPA method procedures or the laboratory's acceptance limits, if they are more stringent than those in the U.S. EPA method procedures; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

## **H. CONTINGENCY REPORTING**

Unauthorized Releases: A report to the Regional Water Board case manager shall be made by telephone and email of any accidental discharge of whatever origin immediately after it is discovered. A written report shall be filed with the Regional Water Board within five days thereafter. This report shall contain the following information:

- a. A map showing the location(s) of discharge(s);
- b. Approximate flow rate;
- c. Nature of effects, i.e., all pertinent observations and analyses; and
- d. Corrective measures underway or proposed.

### **Attachment:**

Table 1 - Schedule for Sampling, Measurements, and Analyses



**TABLE 1  
SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS**

<b>Station</b>	<b>Constituent</b>	<b>Unit</b>	<b>Type of Sample</b>	<b>Frequency of Sampling &amp; Analysis</b>
<b>Site &amp; Receiving Water Standard Observations</b>	Varies – see Definitions of Terms, C.4 and C.5	Not Applicable	Visual Inspection	Daily during sediment placement operations and continuing until completion of final decant discharge event
<b>D-1</b> (inboard side of discharge weir in East Pond as shown in Figure 3 of Order R2-2019-XXXX)	Flow Rate	gpd and monthly total gallons	Weir volume calculation or flow meter measurement	Daily during discharge
<b>D-1</b>	TSS	mg/L	Grab	Within 7 days prior to the start of each discharge event, then once every 7 days for the remainder of the discharge event
<b>D-1</b>	Dissolved Oxygen	mg/L	Field	Same as TSS
<b>D-1</b>	pH	Std Units	Field	Same as TSS

Abbreviations:

gpd = gallons per day  
mg/L = milligrams per liter