

Staff Report 32

LESSEE:

Town of Discovery Bay Community Services District

PROPOSED ACTION:

Amendment of Lease

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Old River, near Discovery Bay, Contra Costa County.

AUTHORIZED USE:

Construction, operation, and maintenance of a proposed wastewater outfall, pipeline, and diffuser.

TERM:

25 years, beginning August 1, 2004.

CONSIDERATION:

The public health and safety; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

PROPOSED LEASE AMENDMENT:

- Authorize installation of an 18-inch-diameter diffuser in the bed of the Old River and removal of approximately 50 feet of deteriorated 10-inch and 6-inch-diameter sections of diffuser in the bed of the Old River.
- Delete Section 3, Land Description.
- Include the attached Exhibit A, Land Description, and Exhibit B, Site and Location Map.
- Include terms related to construction activities.
- Within 60 days of completing the construction of authorized improvements, Lessee will provide Lessor with a set of "as-built" plans that will show where the improvements have been placed. Lessor shall then replace Exhibit A, Land

Description, and Exhibit B, Site and Location Map, to the Lease as necessary to accurately reflect the final location of the authorized improvements. Once approved by the Lessor's Executive Officer or designee and Lessee, the revised Exhibits shall replace the Exhibits incorporated in the Lease at the time of Lease execution. The replaced Exhibits shall be incorporated in the Lease as though fully set forth therein.

All other terms and conditions of the lease to remain in effect without amendment.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On August 17, 2004, the Commission authorized the issuance of Lease Number PRC 8547, a 25-year General Lease – Public Agency Use, to the Lessee for the construction, operation, and maintenance of a proposed wastewater outfall, pipeline, and diffuser ([Item C23, August 17, 2004](#)). The lease will expire on August 16, 2029. The Lessee is now applying to amend the lease for the proposed installation of an 18-inch-diameter diffuser in the bed of the Old River and removal of the existing 10-inch and 6-inch-diameter sections of the diffuser.

The Lessee's existing diffuser is approximately 123 feet in length and includes 18-inch, 10-inch, and 6-inch-diameter sections. The diffuser, as part of the wastewater outfall and pipeline, serves to discharge effluent from the Town of Discovery Bay's wastewater treatment facility. The Lessee completed an assessment of the wastewater outfall, pipeline, and diffuser and determined approximately 50 feet of the diffuser consisting of the 10-inch and 6-inch-diameter sections were deteriorated. The Lessee is proposing the diffuser replacement project (Project).

The Project would include replacement of the existing 10-inch and 6-inch-diameter sections of the diffuser with a new 18-inch-diameter diffuser approximately 50 feet in length. The replacement will result in a diffuser with a continual 18-inch-diameter for the entire approximately 123 feet length of the diffuser resulting in restoration of the full function of the diffuser. The new diffuser will be high-density polyethylene and consistent in material with the existing 18-inch-diameter pipe.

The replacement section diffuser would be assembled on the upland within the staging area located at the wastewater treatment facility. The diffuser will be

installed by divers working from a barge. There would be some suction dredging required to remove granular material and uncover the 10-inch and 6-inch-diameter deteriorated sections of diffuser. A cofferdam or turbidity curtain will not be used for this site, as the suction dredge will reduce turbidity during dredging.

The deteriorated sections of diffuser will be removed from the riverbed. The new section of 18-inch-diameter replacement diffuser will then be installed and bolted to the original 18-inch-diameter section of diffuser. The new section of diffuser will be covered with the granular material removed with the suction dredge. In-water work would occur between September 15 to November 30.

Public access to the Old River at the Project site is not possible from the immediate shoreline as the area is located within the controlled boundaries of the Lessee's wastewater treatment facility. The public can access the Old River at nearby public access sites with day-use facilities and boat launches.

Staff reviewed environmental justice data that indicated high pollution burdens to the surrounding communities. These burdens may result in impacts to health such as asthma and cardiovascular disease. In addition, the same data showed high burdens to water quality. Furthermore, the data revealed that the neighboring communities are disadvantaged. As part of an environmental justice outreach effort, staff contacted via letter on August 4, 2020, several environmental justice organizations in Contra Costa County providing notification of the proposed lease amendment. The letter included a brief description of the project and included the name of a Commission staff person as a point of contact. No comments have been received as a result of the environmental justice outreach.

Staff believes that the lease amendment for installation of a new 18-inch-diameter diffuser and removal of the deteriorated 10-inch and 6-inch diffuser would result in future benefits to the nearby communities by ensuring proper functioning of the outfall and thereby maintaining water quality through dilution requirements of the National Pollutant Discharge Elimination System permit. Commission staff believes that the proposed lease amendment for the installation of the new diffuser and removal of the deteriorated portions of the existing diffuser in the Old River will not substantially interfere with the Public Trust needs and values at this location as the installation and removal will be completed by divers operating from a temporarily anchored barge in the Old River. The barge will be removed upon completion of the project. The project will have a minor, if any, impact on the recreational use of the Old River.

CLIMATE CHANGE:

Climate change impacts, including sea-level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The subject facility is located in the Old River in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea-level rise.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. Commission staff evaluated the “high emissions,” “medium-high risk aversion” scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea-level rise scenario for the lease area as listed in Table 1.

Table 1. Projected Sea-Level Rise for San Francisco

Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	6.9

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update

Note: Projections are with respect to a 1991 to 2009 baseline.

This effect could increase the Old River’s inundation levels within the lease area, and this risk of flood exposure is likely to increase with time. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea-level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate-change induced droughts could decrease river levels and flow for extended periods of time. Climate change and sea-level rise will further influence riverine areas by changing erosion and sedimentation rates.

The combination of these projected conditions could increase the likelihood of damage and affect access to structures within the lease premises during the term of the lease due to higher flood risks. Conversely, prolonged drought conditions could lower water levels, exposing previously submerged structures to the elements

and potentially leading to increased wear and tear on that infrastructure. Lowered water levels could also reduce navigability of the channel, thereby increasing hazards related to the lease area structures.

Although the outfall is submerged, it may need additional repair or replacement to withstand higher levels of flood exposure and more frequent storm events, based on projected sea-level rise and climate change scenarios.

TRIBAL COORDINATION AND CONSULTATION:

Upon review of the Mitigated Negative Declaration (MND), Commission staff identified a concern regarding tribal consultation. The MND stated that no outreach or consultation with California Native American Tribes was necessary because the project consists of an “existing facility” repair.

The State CEQA Guidelines Appendix G Checklist Form was revised via formal rulemaking in September 2016 to ensure lead agencies include in their environmental documents a thorough discussion of tribal engagement and consideration of Tribal Cultural Resources in order to demonstrate compliance with AB 52 (Gatto; Stats. 2014, Ch. 532). AB 52 applies to all CEQA projects initiated after July 1, 2015. In a letter to the Town dated August 3, 2020, Commission staff noted that the Town’s MND, SCH #2020020418, which was initiated after AB 52 went into effect, did not follow the 2016 Appendix G nor contain any information as to how the Town complied with AB 52 provisions. These provisions provide procedural and substantive requirements for lead agency consultation with California Native American Tribes, consideration of effects on Tribal Cultural Resources (as defined in Pub. Resources Code, § 21074), and examples of mitigation measures to avoid or minimize impacts to these resources. The letter noted that the proposed project includes activities well beyond “existing facilities” – including trenching and excavation of the riverbed, and therefore, the information provided in the MND from 2004 was not adequate or in compliance with AB 52.

In response to this letter, the Town conducted tribal notification and outreach (completed on March 26, 2021) and submitted copies of their correspondence with the tribes and a summary of consultation to the Commission's Tribal Liaison. In summary, the Town received two responses to their outreach:

- The Indian Canyon Band of Costanoan Ohlone People (Creative Director/Tribal Monitor) requested “As this area in question is adjacent to a site that has been identified and recorded as culturally sensitive, we recommend that a Native American Monitor and an Archaeologist be present on-site at all times. In the event that any disruptive surveying or earth movement transpires.”
- The Wilton Rancheria stated that they had no concerns about the project.

The Town conducted a conference with the Indian Canyon Band of Costanoan Ohlone People representative, Kanyon Sayers-Roods, and discussed the project details, logistics, and specifications to allow for a better understanding of the project specifics and limited impacts to resources in the project area. Following that conference, the Tribal representative stated that she was comfortable with the language provided in the draft Environmental Monitoring and Mitigation Plan. In addition, the Town agreed to consult with the Tribe prior to project implementation. The Commission Tribal Liaison contacted the Tribal representative to confirm that the Town had accurately characterized her position.

CONCLUSION:

For all the reasons above, staff believes that approval of the requested amendment would not substantially interfere with the public rights to navigation, fishing, and commerce; would not substantially interfere with Public Trust needs and values at this location; and is in the State's best interests.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application for amending the lease is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as a trustee of the State's Public Trust lands as authorized by law. Upon expiration or prior termination of a lease, the lessee has no right to a new lease or renewal of any previous lease.
2. This action is consistent with the "Meeting Evolving Public Trust Needs", the "Leading Climate Activism", "Prioritizing Social, Economic and Environmental Justice", and "Partnering with Sovereign Tribal Governments and Communities" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
3. A Mitigated Negative Declaration, State Clearinghouse No. 2020020418, and an Environmental Monitoring and Mitigation Plan were prepared by the Town of Discovery Bay and adopted on May 18, 2020, and June 2, 2021, respectively, for this project. Commission staff reviewed these documents and prepared an independent Mitigation Monitoring Program (attached, Exhibit C) incorporating the Town of Discovery Bay's document and recommends its adoption by the Commission.
4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon staff's consultation with the

persons nominating such lands and through the California Environmental Quality Act (CEQA) review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS REQUIRED:

U.S. Army Corps of Engineers
Regional Water Quality Control Board, Central Valley
California Department of Fish and Wildlife

EXHIBITS:

- A. Land Description
- B. Site and Location Map
- C. Mitigation Monitoring Plan

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that a Mitigated Negative Declaration, State Clearinghouse No. 2020020418, and an Environmental Monitoring and Mitigation Plan were prepared by the Town of Discovery Bay and adopted on May 18, 2020, and June 2, 2021, respectively, for this project and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization has been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit C.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the approval of the proposed amendment will not interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease; and is in the State's best interests.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

Authorize the amendment of Lease Number PRC 8547, a General Lease – Public Agency Use, of sovereign land located in Old River as described in Exhibit A and shown on Exhibit B (for reference purposes only), attached, and by this reference made a part hereof, effective June 29, 2020; for installation of an 18-inch-diameter diffuser and removal of a 10-inch and 6-inch diameter diffuser from Old River; delete Section 3, Land Description; and include the attached Exhibit A, Land Description and Exhibit B, Site and Location Map; include terms related to construction activities; all other terms and conditions of the lease will remain in effect without amendment.

EXHIBIT A

PRC 8547

LAND DESCRIPTION

A strip of tide and submerged land 25 feet wide lying in the bed of the Old River, Contra Costa County, State of California, lying 12.5 feet on each side of the following described centerline:

BEGINNING at a point on the westerly bank of said Old River, said point having California Coordinate System of 1983 (CCS 83), Zone 3 coordinates of Y=2,146,801.73 feet and X=6,251,091.42 feet and being distant South 72° 32' 23" East, 7,851.63 feet from a monument on the Discovery Bay Boulevard at the southerly terminus of the line between two monuments shown as "N 0° 56' 15" E, 1362.00 feet" on the map entitled "PARCEL MAP, SUBDIVISION M S 18-79" filed on August 28, 1980 in Book 88 of Parcel Maps at pages 40-45, in Contra Costa County Recorder Office, said monument having CCS 83, Zone 3 coordinates of Y=2,149,157.55 feet and X=6,243,601.55 feet; thence North 72° 23' 39" East, 191.57 feet to the TERMINUS of said centerline.

The sidelines of said strip to be lengthened or shortened as to begin at the ordinary high water mark of the west bank of said Old River and terminate at the line perpendicular to the described centerline at the point of TERMINUS.

EXCEPTING THEREFROM any portion lying landward of the ordinary high water mark of the west bank of said river.

BASIS OF BEARING AND DISTANCES are based on CCS 83, Zone 3. Distances are grid distances. Multiply by 1.00007327 to obtain ground level distances.

END OF DESCRIPTION

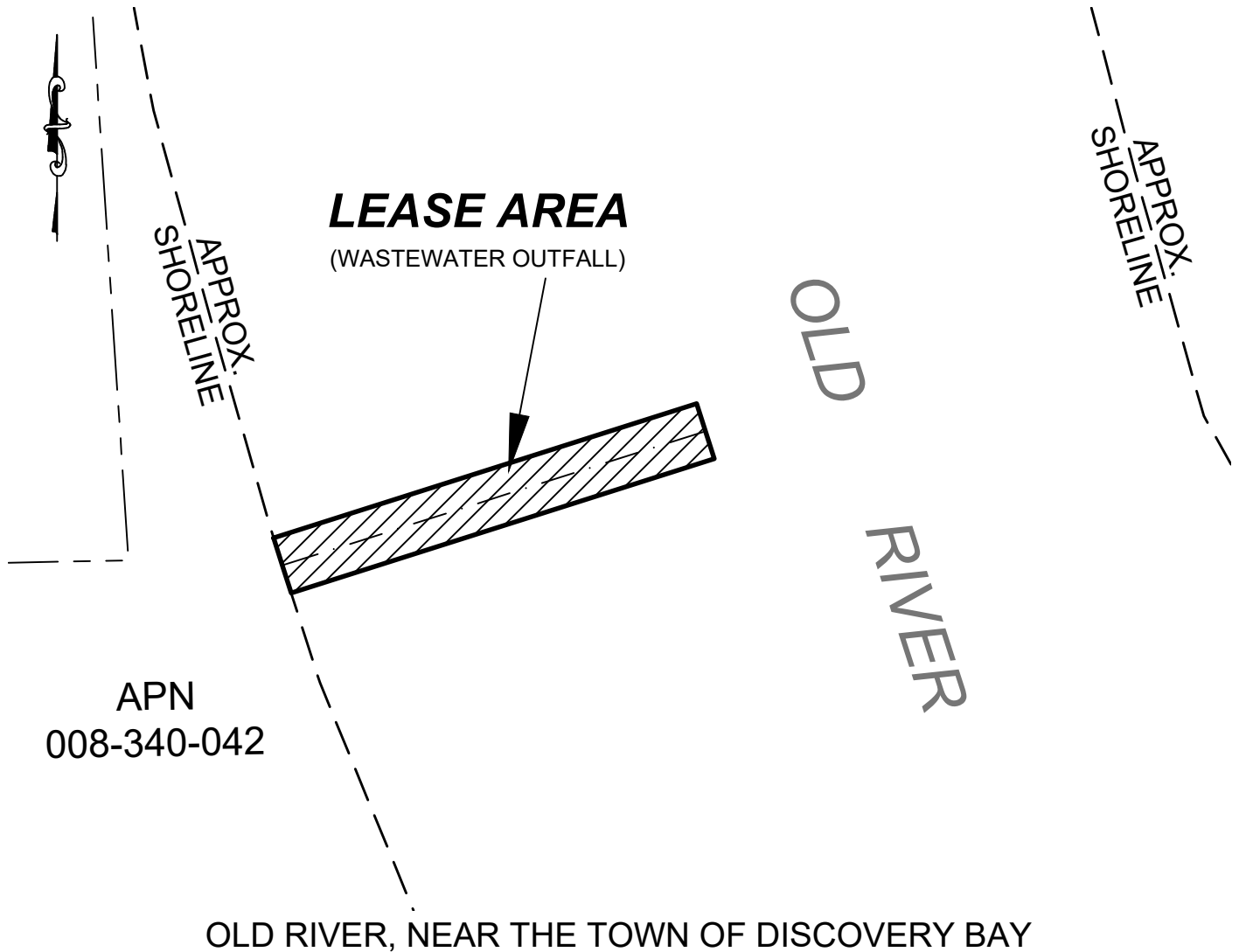
Based on original description prepared by Marilyn J. Lopes, LS 7550 on 08/05/2004 as found in PRC 8547 file.

Revised by the California State Lands
Commission Boundary Unit 12/21/2020.



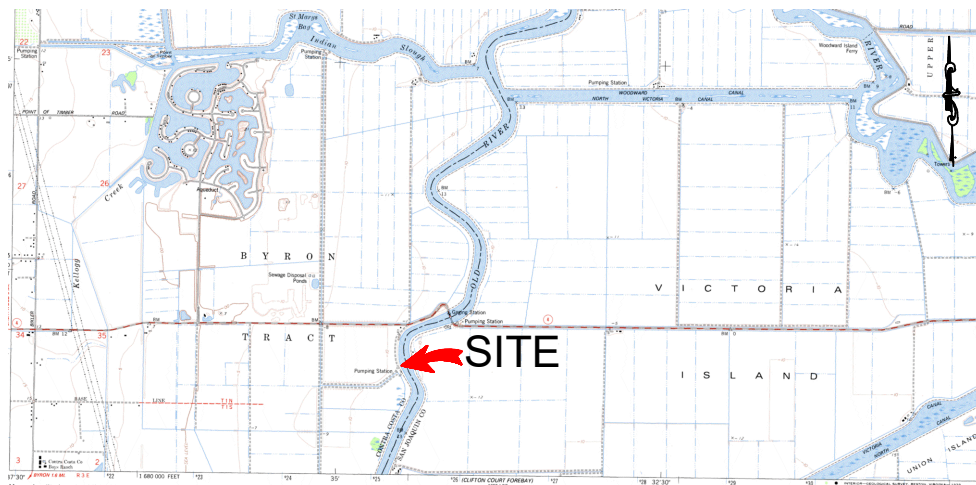
NO SCALE

SITE



NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

Exhibit B

PRC 8547
TOWN OF DISCOVERY BAY
COMMUNITY SERVICES DISTRICT
APN: 008-340-042
GENERAL LEASE -
PUBLIC AGENCY USE
CONTRA COSTA COUNTY



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

TS 12/21/2020

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM
TOWN OF DISCOVERY BAY – DIFFUSER OUTFALL REPAIRS PROJECT
(A2660, State Clearinghouse No. 2020020418)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the Town of Discovery Bay Diffuser Outfall Repairs (Project). The CEQA lead agency for the Project is Town of Discovery Bay (Town).

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines section 15097, subdivision (a), states in part:¹

In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

The lead agency adopted an MND, State Clearinghouse No. 2020020418, adopted an Environmental Monitoring and Mitigation Plan (EMMP) for the whole of the Project (see Exhibit C, Attachment C-1), and remains responsible for ensuring that implementation of the mitigation measures is in accordance with its Plan. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below. The full text of each mitigation measure, as set forth in the EMMP prepared by the CEQA lead agency and provided in Attachment C-1, is incorporated by reference in this Exhibit C. Any mitigation measures adopted by the Commission that differ substantially from those adopted by the lead agency are shown as follows:

- Additions to the text of the mitigation measure are underlined; and
- Deletions of the text of the mitigation measure are shown as ~~strikeout~~ or as otherwise noted.

¹ The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM) ²	Difference Between CSLC MMP and Lead Agency EMMP
Western Pond Turtle	BIO-2	None
Construction Impacts to Fish	BIO-3	None
Cultural Resource Discovery	CR-1	See addition below
Discovery of Human Remains	CR-2	None
Erosion Control	GEO-1	None
Hazardous Material Spills	HAZ-1	None
Worker Safety	HAZ-3	None
Water Quality	WQ -1, WQ-2, WQ-3, WQ-4, WQ-5	None
Noise Impacts to Species	NO-5	None

Addition to CR-1:

Title to all archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the Commission. Commission staff shall be notified of any cultural resources or paleontological specimens discovered on lands under the jurisdiction of the Commission. The final disposition of archaeological and historical resources or paleontological specimens from such lands must be approved by the Commission.

Project Best Management Practices (BMPs) and Applicant-Proposed Measures (APMs)

Potential Impact	BMP/APM
Air Quality	AQ BMP-1
Fish Migration	BR APM-5
Tribal Cultural Resources	CR APM-3

² See Attachment C-1 for the full text of each MM, BMP, or APM taken from the EMMP prepared by the CEQA lead agency.

ATTACHMENT C-1

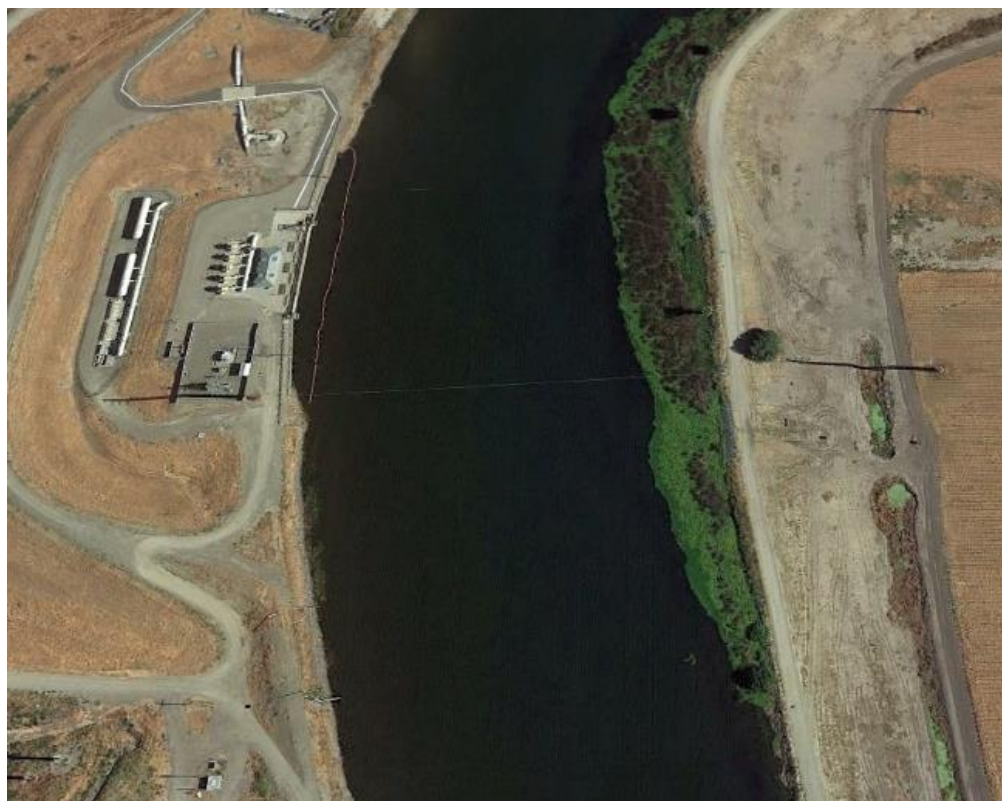
Environmental Monitoring and Mitigation Plan

Adopted by the

Town of Discovery Bay

Environmental Monitoring and Mitigation Plan (EMMP)

Town of Discovery Bay Diffuser Outfall Repair Project



Prepared for:

Town of Discovery Bay, California

May 2021

Prepared by:

**Advisian Worley Group
2330 E Bidwell Street, Ste. 120
Folsom, CA 95630 USA**

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A. Abbreviations

ADA	Americans with Disabilities Act
AQMD	Air Quality Management District
BMP	Best Management Practices
BSA	Biological Study Area
BRR	Biological Resources Report
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CDFG	California Department of Fish and Game (now CDFW)
CDFW	California Department of Fish and Wildlife (formerly CDFG)
CDPR	California Department of Parks and Recreation
CNDDDB	California Natural Diversity Database (maintained by CDFW)
CNPS	California Native Plant Society
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
IS	Initial Study
MND	Mitigated Negative Declaration
NPDES	National Pollutant Discharge Elimination System
NP	Natural Preserve
PRC	Public Resources Code
RWQCB	Regional Water Quality Control Board
SWPPP	Storm Water Pollution Prevention Plan
City	Town of Discovery Bay
USACE	United States Army Corp of Engineers

CHAPTER 1 - INTRODUCTION

1.1 CEQA REQUIREMENTS

1.1.1 Program Objectives

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document that includes measures to comply with, monitor, mitigate, or avoid significant environmental effects, the public agency must adopt an Environmental Monitoring and Mitigation Plan (EMMP) for the changes to the project that it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The appropriate reporting or monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

The Town of Discovery Bay (Town) would coordinate monitoring of the implementation of all mitigation measures for the project with the Town of Discovery Bay (City). Monitoring will include: 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation measure; and 3) retention of records in the project file.

The objectives of the EMMP for the Proposed Project include the following:

- To provide assurance and documentation that mitigation measures are implemented as planned
- To collect analytical data to assist Town administration in its determination of the effectiveness of the adopted mitigation measures
- To report periodically regarding project compliance with mitigation measures, performance standards and/or other conditions
- To make available to the public, upon request, the Town record of compliance with project mitigation measures

1.1.2 Lead Agency

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is the Town. The contact person for the lead agency is:

Aaron Goldsworthy, Water and Wastewater Manager
Town of Discovery Bay
1800 Willow Lake Road
Discovery Bay, CA 94505-9376
(925) 634-1131
agoldsworthy@toddb.ca.gov

1.1.3 Project Description

The existing Wastewater Treatment Facility consists of two adjacent Plants: 1 and 2. Plant 1 is in the southeast corner of the Town of Discovery Bay, north of Highway 4. Surrounding the plant are single-family homes and a golf course to the north and west, the Contra Costa County Reclamation District 800 drainage canal to the east (across which is open agricultural land), and Highway 4 to the south (across which is more open agricultural land). The site is nearly flat, between 5 and 10 feet below sea level. Plant 1 consists of a bar screen, a comminutor, an oxidation ditch, two secondary clarifiers, and an emergency storage lagoon. The original wastewater capacity of Plant 1 was 1.2 million gallons per day (mgd), but modifications in the late 1980's increased its capacity to 1.3 mgd, sufficient to serve 3,979 housing units. The treated effluent from the plant is discharged to the Reclamation District 800 drainage canal, from which it is pumped into Old River. The current project proposed no changes for Plant 1.

Plant 2 is located diagonally across Highway 4 from Plant 1. Highway 4 forms the north boundary of the site, separating it from open agricultural land. The Reclamation District 800 drainage canal forms the west and south boundary of the Plant 2 site, separating it from open agricultural land. There is open agricultural land to the east of the plant. The site is nearly flat at about 10 feet below sea level. Plant 2 consists of an oxidation ditch, secondary clarifier with lift station, pump station, ultraviolet disinfection system, modified flow splitter box and two sludge lagoons. The combined capacity of the two plants is a total of 2.1 mgd at full operational capacity.

Treated effluent from the plant is pumped to existing outfall facility and diffuser, comprised of a multi-port diffuser system. This current facility conveys the discharge to a 14-inch diameter force main that is buried in a trench to the outfall system, with effluent pumped into Old River through a penetration at the Old River levee, extending approximately 100 feet out from the levee into a trench along the bottom of the Old River channel. The pipeline terminates in a diffuser (an energy dissipation structure to prevent erosion) consisting of short vertical pipes to release the treated water into Old River.

Per the Outfall Assessment (Worley Assessment) Conclusions and Recommendation, the following analyses include:

- Sections of the diffuser appear to be damaged, either partially operating (downstream end of the 10-in. segment) or non-operating (6-in. segment). Based on the 2017 underwater survey prepared by Bishop Diving & Salvage (2017), the 6-in. segment of the diffuser is non-operational with no flow observed in any of its ports. Also, per the underwater survey the 10-in. segment appears to have weak flow at the downstream end. The CCTV camera inspection completed by Subtronic Corporation indicated that a blockage was present at the downstream end of the 10-in. segment, verifying the flow observations made by the underwater survey.
- The hydraulic assessment completed for the Town's sanitary system (from the lift station to the outfall) indicated that the current system is operating with higher head loss compared to its original design. Therefore, the lift station has to deliver a higher pumping head to convey flow through the system. The results showed that to deliver a flow of 3.11 MGD the lift station required a pumping head of 19.9 psi, while under normal conditions the expected pumping head should be of approximately 15 psi. The higher-pressure head required is a result of additional losses encountered by flow being channeled through a lower number of diffusers which increases the jet velocity and the loss at each Tideflex valve. These observed increased head losses are in agreement with 2017 results of the underwater and the CCTV camera inspection (2017).
- To improve the overall system performance, the existing diffuser should be repaired or upgraded.

1.1.4 Project Location

The project sanitary outfall is located in eastern Contra Costa County, California approximately 60 miles from San Francisco, in a section of the Old River flanked by earthen levees. The site is located adjacent to the west levee (left riverbank) and south of the Contra Costa Water District (CCWD) Los Vaqueros Pump Station (Figures 1 and 2). Based on the Kleinfelder Inc. geotechnical report (2004), the Old River at the site location has the following tidal water-level fluctuations and information:

100-year Flood Elevation – 7.5 feet (ft.)

Mean High Water Elevation – 2.4 ft.

Mean Higher High-Water Elevation – 3.5 ft.

Mean Lower Low Water Elevation – -0.5 ft.

Extreme Low Water Elevation – -2.0 ft.

Flow velocity – 3 to 4 ft./s

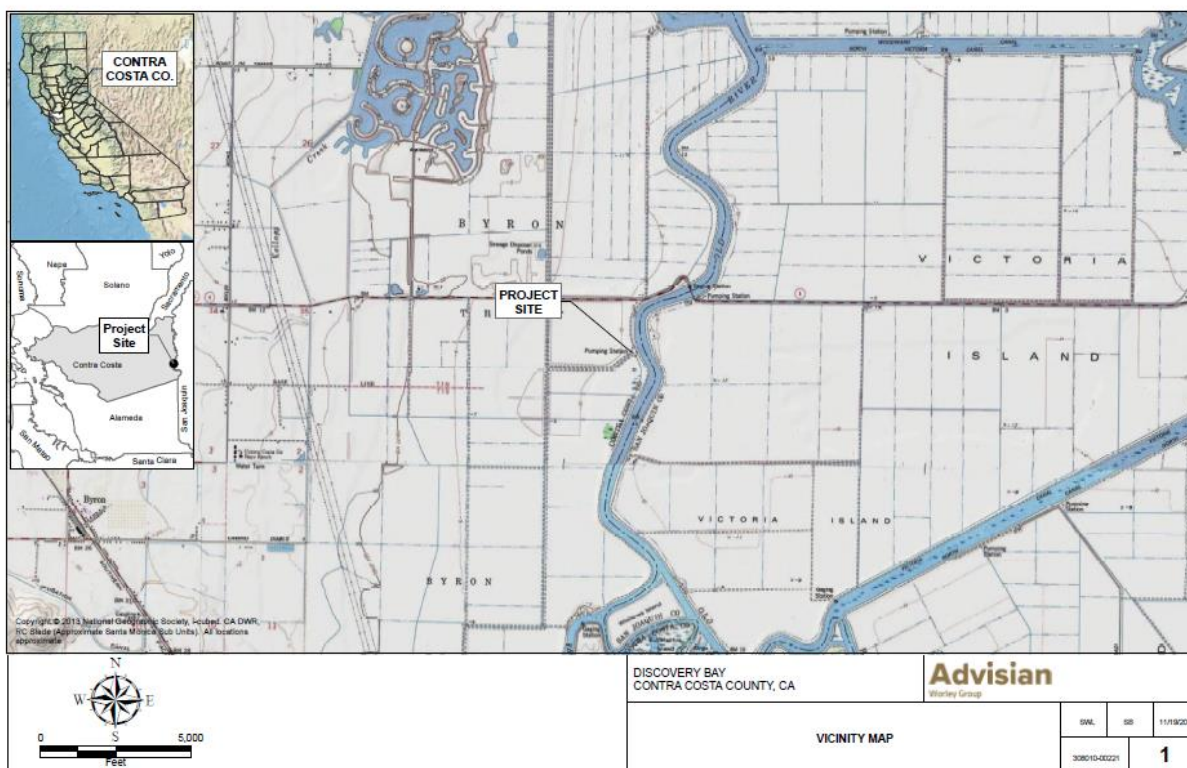


Figure 1 – Vicinity Map



Figure 2 – Site Map

1.1.5 CEQA Analysis Discussion and Findings

As discussed in the ISMND Section II, Agricultural, the project site is almost completely in fallow agricultural use, providing minimal habitat for species of concern. Section IV, Biological Resources, also indicates the lack of sensitive species on the project site and directs the discussion of mitigation measures for potential loss of sensitive-species habitat. Section V, Cultural Resources, indicates there are no known cultural resources on the site and directs the discussion to mitigation measures to be implemented in the event such resources are discovered at the site, during excavation activity. Section XI, noise indicates no nearby sensitive receptors and directs to the discussion of mitigation measures for noise effects during the construction period.

Based on the findings of this Initial Study, the proposed project would not degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare, or threatened or endangered plant or animal. No examples of California history or prehistory are known to exist at the project site. As a result of the analysis in the present Initial Study and available project data, the proposed project would have a less-than-significant impact on these resources. No important examples of California history or prehistory will be eliminated as a result of the project.

Based on the ISMND and supporting environmental analysis provided, the proposed project would result in less-than-significant impacts to the following resources or issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise,

population and housing, public services, recreation, transportation/traffic, and utilities and service systems

1.1.6 Regulatory Overview

The proposed replacement outfall diffuser is necessary to comply with the RWCCB5 Water Discharge Requirements Order No. R5-2003-0067 and NPDES Permit No. CA0078590.

Construction of the proposed outfall replacement will comply with the NPDES General Permit for Storm Water Discharges Associated with Construction Activities (Order No 2009-0009DWQ). The Clean Water Act prohibits the discharging of pollutants through a point source into a water of the United States without a National Pollutant Discharge Elimination System (NPDES) permit.

Central Valley Regional Water Quality Control Board issued a Clean Water Act Section 401 Technically Conditioned Water Quality Certification (WDID#5B07CR00225).

California Fish and Wildlife will issue a Lake and Streambed Alteration Agreement (LSA) for the construction of the outfall.

The potential for the project to affect ESA-protected anadromous fish species was initiated in an 18 December 2020 Section ESA – Initiation Package for Endangered Species Act Consultation prepared by Advisian on behalf of the Town and submitted to the United States Army Corps of Engineers (USACE). The fish species include: The Endangered Sacramento River winter-run Chinook salmon, and three Threatened species, including: Central Valley spring-run Chinook salmon, California Central Valley steelhead, and southern distinct population segment of North American green sturgeon. This Section 7 Consultation report was provided to the USACE on 18 December 2020, and comments were received from the USACE on 21 April 2021. The Section 7 Initiation Package with clarifications from Advisian and the USACE was reviewed by the National Marine Fisheries Service, West Coast Region, and in a letter of 7 May, 2021, indicated that the proposed project as presented including the designated construction schedule would be unlikely to adversely affect these fish species or designated critical habitat.

Note: the September 15-November construction window mostly avoids these species movements through Old River.

1.1.7 Organization of the Monitoring and Mitigation Program

The following describes the various sections of the MMRP:

Introduction - Provides an overview of CEQA's monitoring and reporting requirements, program objectives, the project for which the program has been prepared, and the manner in which the mitigation monitoring program has been organized.

EMMP - Describes the entities responsible for implementation of the monitoring and mitigation plan, the plan scope, procedures for monitoring and reporting, public availability of documents, the process for making changes to the program, types of mitigation measures, compliance actions and the manner in which monitoring will be coordinated to ensure implementation of mitigation measures.

Mitigation Monitoring and Reporting Summary - Outlines the impacts and avoidance actions, mitigation measures, responsible entities, and the timing for monitoring and reporting for each

mitigation measure included in the plan. A form for actual use by the Facilities, Planning & Development office and/or its assigned agents will be constructed from this information for each responsible entity.

These action items are detailed in two sections within Chapter 3: Section 3.1 MONITORING AND MITIGATION MEASURES (Table 3.1) and Section 3.2 APPLICANT PROPOSED MEASURES (Table 3.2). Table 3.1 encompasses the measures outlined in the ISMND and Table 3.2 encompasses additional measures recommended by regulatory agencies and project team members during the planning and design phases of the project.

Report Preparation - Lists the individuals involved in development of this EMMP.

CHAPTER 2 - DESCRIPTION OF PLAN

2.1 MONITORING AND MITIGATION PROCEDURES

This EMMP delegates responsibilities for monitoring the project, and also allows responsible entities flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. The timing for monitoring and reporting is described in the monitoring and reporting summary table included as part of this program (see Chapter 3). Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

In order to enhance the effectiveness of the monitoring program, Town will utilize existing systems where appropriate. For instance, with any major construction project, the administration generally has at least one inspector assigned to monitor project construction. These inspectors are familiar with a broad range of regulatory issues and will provide first-line oversight for much of the monitoring program.

Additional compliance, monitoring, mitigation or management personnel to provide expert guidance, reporting or implementation will be assigned as appropriate to meet the mitigation requirements outlined in Chapter 3.

Responsibilities of Town include identification of typical mitigation measure-related issues such as noisy equipment, dust, safety problems, and accelerated erosion/drainage. Any problems are generally corrected through directions to the contractors, or through other appropriate, established mechanisms. Internal reporting procedures are already in place to document any problems and to address broader implementation issues.

2.1.1 Reporting Procedures

The City is be responsible for monitoring and implementing the mitigation measures included in this monitoring plan.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate company office (as indicated in the summary form) or employs the office's existing reporting process for verification of compliance.
- Responsible entities verify compliance by signing the monitoring and reporting form and/or documenting compliance using their own internal procedures when monitoring is triggered.
- Responsible entities provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented.
- The City prepares construction activities' reports during the construction phase and incorporates project reports, as appropriate, into the periodic reports summarizing all City mitigation monitoring efforts.

The reporting forms prepared by the City would document the implementation status of mitigation measures of the project. The progress reports describe the monitoring status of all project mitigation measures. Project reporting forms and periodic status reports will be available at the City.

The City would also be responsible for assisting their contractor with reporting responsibilities to ensure that they understand their charge and complete their reporting procedures accurately and on schedule.

2.1.2 Public Availability

All monitoring reporting forms, summaries, data sheets, and correction instructions related to the EMMP, would be available for public review upon request at the City during normal business hours.

2.1.3 Program Changes

If minor changes are required to the EMMP, they would be made in accordance with CEQA and would be permitted after further review by the City. Such changes could include reassignment of monitoring and reporting responsibilities and/or redesign to make any appropriate improvements. No change would be permitted unless the mitigation monitoring and reporting plan continues to satisfy the requirements of Public Resources Code Section 21081.6.

2.1.4 Types of Mitigation and Compliance Being Monitored

The Initial Study/Mitigated Negative Declaration for the Town of Discovery Bay Outfall Diffuser Upgrade Project is a “project specific” evaluation as defined in the CEQA Guidelines.

The Initial Study/Mitigated Negative Declaration recommends thirty project-specific mitigation measures to reduce impacts related to air quality, biological resources, and cultural resources during construction, and four additional Applicant Proposed Measures. Compliance with these mitigation measures will be accomplished through administrative controls over project planning and implementation, in this case, through incorporation of specific construction methods, and verification of construction in accordance with these special provisions. Monitoring would be accomplished as described previously under “Reporting Procedures” through verification and certification by personnel.

In general, implementation of the EMMP will require the following actions:

- Appropriate mitigation measures would be included in construction documents.
- Departments with reporting responsibilities would review the Initial Study/Mitigated Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance would be addressed by Town as appropriate.
- Periodic meetings may be held during project implementation to report on compliance with mitigation measures.

CHAPTER 3 – EMMP OUTLINE TABLES

3.1 MONITORING AND MITIGATION MEASURES

					Verification of Compliance		
Mitigation Measure	Responsible Entity	Monitoring Triggers*	Monitoring Entity*	Compliance Action	Initials	Date	Comments
AIR QUALITY							
AQ BMP-1: Standard construction protocols for dust control during construction and demolition shall be implemented. These protocols shall be included within the Storm Water Plan. The State's Representative and/or State Natural Resources Specialist will periodically inspect the work area to ensure that construction-related activities do not generate excessive amounts of dust or cause other related air quality disturbances.	TOWN	3	City	Start of Construction Activities and Any Disturbance			
AQ BM-2: Idling of vehicles shall be minimized to the maximum extent practicable.	Town	2, 3	City	Start of Construction Activities and All Machinery Operations			

AQ BMP-3: All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.	TOWN	2, 3	City	During Construction Activities and Disturbance			
AQ BMP-4: All haul trucks transporting soil, sand, or other loose material off-site shall be covered	TOWN	2, 3	City	During Construction Activities and All Machinery Operations			
AQ BMP-5: All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.	TOWN	2, 3	City	During Construction Activities, Disturbance and All Machinery Operations			
AQ BMP-6: All vehicle speeds on unpaved roads shall be limited to 15 mph.	TOWN	2, 3	City	During Construction Activities, Disturbance and All Machinery Operations			
AQ BMP-7: All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.	TOWN	2, 3	City	During Construction Activities, Disturbance and All Machinery Operations			

AQ BMP-8: Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.	TOWN	2, 3	City AQMD	During Construction Activities, Disturbance and All Machinery Operations			
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BIOLOGICAL RESOURCES

<p>BIO-1: Birds: To reduce the potential for the project to negatively affect sensitive bird species, the following mitigation measures shall be implemented as part of the project:</p> <p>Burrowing Owls – Burrowing owls have occurred in the southwestern part of the project site (Notification of Lake or Streambed Alteration for the Town of Discovery Bay 2004). Thus, the potential for burrowing owls to occur near the site remains. However, maintenance operations to control weeds through disking and mowing have reduced the potential for burrows to occur on the project site, and this species has not recently been observed by treatment-plant maintenance personnel (Sadler 2019). If burrowing owls are not observed within 150 meters of the construction area, no mitigation measures are required.</p>	TOWN	2	City	Start of Construction Activities and Any Disturbance			
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<p>Conversely, if owls are observed within this area, the following measures, as specified by the CDFG (2012), shall be followed:</p> <ul style="list-style-type: none"> - All occupied burrows should be avoided, and disturbance should not occur within 50 meters (160 feet) during the non-breeding season (September 1 through January 31) or within 200 meters (655 feet) during the breeding season (February 1 through August 31). <p>Horned Lark – Maintenance activities, including disking and mowing, that have reduced vegetation stature on the site thereby reducing the potential for horned larks to nest in the vicinity of the proposed project site. Moreover, if no vegetation removal would occur as part of the project, and especially during the nesting period (February 1 through August 31), then no effects would be anticipated. Because of the lack of nesting habitat and the lack of vegetation removal by the project, impacts from the proposed project to horned larks would be less-than-significant.</p>							
<p>BIO-2: Western Pond Turtle – No appreciable changes in water levels from the discharge of treated water into Old River is anticipated and no effects would be expected to western pond turtle use of the area and no mitigation measures are required.</p>	TOWN	2	City	Start of Construction Activities and Any Disturbance			

<p>Pond turtles would be more likely to use slowly moving water at the river's edge and areas on the banks for basking. Turtles could wander into construction areas, which could place them at risk. Mitigation measures to reduce potential impacts from construction include:</p> <ul style="list-style-type: none"> • Open trenches shall be inspected prior to the start of work each day to ensure that no turtles have entered into the construction zone. Any turtles in such areas, including trenches, shall be removed and placed in the closest body of water. • Prior to the start of work each day at the diffuser structure, the rip-rap shall be inspected to ensure that no turtles are present. Any turtles occurring in this area shall be relocated 100 feet downstream of the construction area. 							
<p>BIO-3: Fish – Construction of the proposed project has potential to cause direct impacts to Delta smelt, longfin smelt, and Sacramento splittail. Work to remove the old diffuser pipe and install a new diffuser could affect Delta smelt and Sacramento splittail as they move through the area, and the longfin smelt spawning in areas of rip-rap along the banks. Delta smelt spawning habitats also occur in the area of the proposed project, but this</p>	TOWN	2	City	Start of Construction Activities and Any Disturbance			

species has not been reported for the area (Moore 2003). Mitigation measures to reduce impacts to these three-fish species to less-than-significant include restricting construction work to September through October reduce the potential for sedimentation to affect fish movements and especially longfin smelt spawning that may occur while removing the old diffuser and in the vicinity of trenching to place the new diffuser. Construction outside of this time period could be considered a significant impact but constricting the trenching work to the shortest period possible (e.g., two to three weeks) would help reduce the potential for sediment to negatively affect spawning, including egg maturation and juvenile survival.							
BIO-4: Open Trenches - Any open trenches, pits, or holes with a depth larger than one (1) foot shall be covered at the conclusion of work each day with a hard, non-heat conductive material (e.g., plywood). No netting, canvas, or material capable of trapping or ensnaring wildlife shall be used to cover open trenches. If use of a hard cover is not feasible, multiple wildlife escape ramps shall be installed, constructed of wood or	TOWN	2, 3	City	Start of Any In-Water Construction Activities and Disturbance			

<p>installed as an earthen slope, in each open trench, hole, or pit that is capable of allowing large (e.g., deer) and small (e.g., snakes) wildlife to escape on their own accord. Prior to the initiation of construction each day and prior to the covering of the trench at the conclusion of work each day, the Designated Biologist or Qualified Biological Monitor shall inspect the open trench, pit, or whole for wildlife. If wildlife is discovered, it shall be allowed to leave. If wildlife does not leave, and the animal is a State-listed species, consultation is required before work can be initiated.</p>							
<p>BIO-5: Open Pipes Restriction - All pipes, culverts, hoses, or similar structures that are stored at the construction site, vertically or horizontally, for one or more overnight periods shall be securely capped, screened, or filled with material on both ends prior to storage and thoroughly inspected for wildlife by the Qualified Biological Monitor, in consultation with the Designated Biologist, prior to use. Only the Designated Biologist shall relocate special status species wildlife, if necessary. All hollow pipes or posts installed as part of the Project and exposed to the environment shall be capped,</p>	TOWN	2, 3	City	Materials storage, During Construction Activity			

screened, or filled with material by Permittee prior to the end of the workday in which installation occurs.							
CULTURAL RESOURCES							
CR-1: Cease Construction Work Upon the Discovery of Historic or Archaeological Resources: Evaluate Resources Before Continuing Construction If potential historic or archaeological resources are discovered during construction, all work should be suspended in the immediate vicinity (within approximately 50 feet) with the objective to avoid altering the material and their context pending a site investigation by a qualified archaeological or cultural resources consultant who should be retained by the project sponsor. Construction work shall not commence again until an opportunity is provided to examine the findings, assess their significance and provide proposals for any additional exploratory measures deemed necessary for further evaluation of and/or mitigation of adverse impacts to any potential historical resources or unique archaeological resources that have been encountered. If the finding is determined to be an historic or unique	TOWN	2	City	Start of Construction Activities and Any Disturbance			

<p>archaeological resource, and if avoidance would not be feasible, the archaeological or cultural resources consultant shall prepare a plan for the methodical excavation of the site and resources that would be adversely affected. The plan shall be designed to result in the extraction of sufficient volumes of non-redundant archaeological data to address important regional research considerations. The work shall be performed by the archaeological or cultural resources consultant and shall result in detailed technical reports. Such reports will be submitted to Contra Costa County, the Town of Discovery Bay, and the California Historic Resources Regional Information Center. Construction in the vicinity of the find shall be accomplished in accordance with current professional standards. The project sponsor shall assure that project personnel are informed that law prohibits collecting significant historic or unique archaeological resources discovered during development of the project. Prehistoric or Native American resources can include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soils containing shell and bone dietary debris, heat-affected rock, or human burials.</p>							
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Historic resources can include nails, bottles, or other items occurring in refuse deposits.							
CR-2: Cease Work upon the Discovery of Human Remains: Evaluate Remains before Continuing Construction. In the event of discovery or recognition of any human remains on the project site, the contractor shall contact Contra Costa County Coroner, pursuant to Section 7050.5(b) of the California Health and Safety Code. In this event, there shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent remains until the coroner determines the origin of such remains. The coroner, upon recognizing the remains as being of Native American origin, shall contact the Native American Commission within 24 hours of the coroner being notified. No further disturbance of the site may occur except as authorized by the coroner. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, including the designation of a Native American Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for the	TOWN	2	City	Start of Construction Activities and Any Disturbance			

protection of Native American human remains and skeletal remains from vandalism and inadvertent destruction. To achieve this goal, construction personnel on the project shall be instructed as to both potential for discovery of cultural or human remains, and the need for proper and timely reporting of such finds, and the consequences of failure to do so.							
GEOLOGY AND SOILS							
GEO-1: Erosion Control A. Prior to the start of construction, Contractor will prepare a Storm Water Plan for CDPR approval that identifies the BMPs to be used in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, or trenching. B. BMPs must be in place at all times including covering (tarping) any stockpiled materials or soils and by constructing silt fences, straw-bale barriers, fiber rolls, or other structures around stockpiles and disturbed areas.	TOWN	2	City	Start of Construction Activities and Any Disturbance Incorporate into SWPPP			
HAZARDS AND HAZARDOUS MATERIALS							

<p>HAZ-1: Hazardous Material Spills</p> <p>A. Prior to the start of construction, the contractor shall clean all equipment before entering the project site. Equipment shall be cleaned and repaired (other than emergency repairs) outside the project site boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds shall be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.</p> <p>B. Prior to the start of construction, the contractor shall inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site.</p> <p>C. Prior to the start of construction, the designated contractor shall prepare a Spill Prevention and Response Plan (SPRP) to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan shall include (but not be limited to):</p> <p>1. A map with both primary and secondary containment areas with a listing of BMPs to be used to prevent the accidental release of fluid materials, including concrete.</p>	TOWN	1, 2	City	Start of Construction Activities and Any Disturbance			
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<p>2. A map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur.</p> <p>3. A list of items required in a spill kit on-site that will be maintained throughout the life of the project.</p>							
<p>HAZ-2: Fire Safety</p> <p>A. Prior to the start of construction, the Project Contractor shall develop an approved Fire Safety Plan. The plan will include the emergency calling procedures for the Local Fire Department.</p> <p>B. Spark arrestors or turbochargers (which eliminate sparks in exhaust) and fire extinguishers will be required for all heavy equipment.</p> <p>C. Cutting of vegetation within the staging area and the use a ground barrier covered with leveling fill will keep construction vehicles away from flammable material, such as dry grass or brush.</p>	TOWN	1	City	Start of Construction Activities and Any Disturbance			

HAZ-3: Worker Safety Require construction personal to have appropriate training in compliance with 29 CFR, §§1910, et seq. (Occupational Safety and Health Standards), 1926 et seq (Safety and Health Regulations for Construction) and 8 CCR § 5192 (Hazardous Waste Operations and Emergency Response) to protect workers.	TOWN	2	City	Pre-Construction Training			
HYDROLOGY AND WATER QUALITY							
WQ-1: Prior to the start of work, the contractor shall develop a Storm Water Plan that identifies BMPs to be used in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all ground disturbing activities.	TOWN	1, 2	City	Design, Pre-construction Planning Prior to Construction			
WQ-2: The project shall comply with all applicable water quality standards as specified in the Central Valley RWQCB Water Quality Control Plan (Valley Plan).	TOWN	2, 3, 4, 5	Central Valley Regional Water Quality Control Board (CVRWQCB)	Design, Pre-construction Planning, Construction and Operations			

WQ-3: For construction activities that extend into the rainy season or if an unseasonal storm is anticipated, the contractor shall cover (i.e., tarp) any stockpiled materials or soil and install silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and areas of ground disturbance as may be required.	TOWN	3	City	During Construction Activities During/Prior to Rain Events			
WQ-4: Signage related to the presence of a potential inundation zone will be installed pursuant to the County of Contra Costa and Town of Discovery Bay Signage Policy, including an applicable Tsunami Evacuation Route. Such measures are intended to reduce the potential impacts resulting from a mudflow or tsunami event.	TOWN	1, 2	City	Pre-Construction Signage, Construction Monitoring			
WQ-5: Hydraulic Dredge Operation. The hydraulic dredge shall be operated so that the intake is at or below the surface of the material being removed. The hydraulic dredge intake may be a raised a maximum of three (3) feet above the river bottom for brief periods for the purpose of purging or flushing of the intake system.	TOWN		City	During Construction Activities			
NOISE							
NO-1: All work will be performed between the hours of 7 a.m. and 7 p.m. Monday through	TOWN	1, 2, 3	City	Design, Pre-construction Planning,			

<p>Saturday. Additional implementation of BMPs will include the following procedures, to be incorporated into the construction documents and to be implemented by the project contractor:</p> <ul style="list-style-type: none"> • Comply with noise and vibration control measures identified in the Contra Costa County Special Plan • Maximize the physical separation between noise generators and noise receptors. • Select quiet construction equipment whenever possible, particularly air compressors. • Prohibit unnecessary idling of internal combustion engines for near sensitive receptors. • Select routes for movement of construction-related vehicles and equipment in conjunction with Contra Costa County such that noise-sensitive areas, including residences, hotels and outdoor recreation areas are avoided as much as possible. • Transportation of heavy equipment and trucks 				Construction Activities and Coordinator			
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shall be limited to weekdays between the hours of 7a.m. and 7p.m. Designate a noise coordinator who will be responsible for responding to complaints about noise during construction. Post the telephone number as well as the construction schedule in a conspicuous place at the construction site.							
NO-2: Construction activities shall be limited to daylight hours, Monday through Friday between 7:00 AM and 7:00 PM. Weekend or holiday work could be implemented to address emergencies or unforeseen circumstances impacting construction.	TOWN	3	City	During Construction Activities			
NO-3: Internal combustion engines used for any purpose at the job site shall be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction shall utilize noise control techniques (e.g., engine enclosures, acoustically attenuating shields, or shrouds, intake silencers, ducts, etc.).	TOWN	3	City	All Construction Activities, Vehicle Access and Operation			
NO-4: Noise monitoring will be conducted, and sound-absorbing barriers will be installed local to the loader as needed (for an estimated additional 5 dBA attenuation).	TOWN	3	City	All Construction Activities Exhibiting Noise			

NO-5: Noise generated from demolition or construction activities shall be limited to avoid seasons of peak visitation, and time periods when sensitive wildlife species may be significantly impacted.	TOWN	3	City	All Construction Activities Exhibiting Noise			
TRANSPORTATION/TRAFFIC							
TR-1: Construction equipment and employee parking will be confined to the construction staging area identified in Figure 3 so as not to traffic and to maintain site control.	TOWN	3	City	All Construction Activities and Vehicle/Machinery Use			

B. Table 3.1

3.2 APPLICANT PROPOSED MEASURES

Mitigation Measure	Responsible Entity	Monitoring Triggers	Monitoring Entity	Compliance Action	Verification of Compliance		
					Initials	Date	Comments
BIOLOGICAL RESOURCES							
BIO-5: In-water work window September 15, 2021 to November 1, 2021 to avoid to the extent possible fish migration-movements through the project site.	TOWN	2,3	City	Start of Construction Activities and Any Disturbance			
CULTURAL RESOURCES							

Mitigation Measure	Responsible Entity	Monitoring Triggers	Monitoring Entity	Compliance Action	Verification of Compliance		
					Initials	Date	Comments
CR-3: Properly Trained Native American Monitor to be present on-site at disturbance activity. Project Compliance Manager may qualify under authorization of TE.	TOWN	1, 2, 3	NAHC/TE	During Disruptive Surveying or Earth Movement Activities			
HAZARDS AND HAZARDOUS MATERIALS							
HAZ-3: Worker Safety Require construction personal to have appropriate training in compliance with 29 CFR, §§1910, et seq. (Occupational Safety and Health Standards), 1926 et seq (Safety and Health Regulations for Construction) and 8 CCR § 5192 (Hazardous Waste Operations and Emergency Response) to protect workers.	TOWN	2	City	Pre-Construction Training			
WEATHER AND CLIMATE							
WC-1: Minimization and Avoidance Measures <ul style="list-style-type: none"> The in-water work window of September 15 to November 1 minimizes impacts to listed fish species by reducing the potential for fish to be present during construction activities. Best Management Practices (BMPs) to reduce turbidity, siltation, sedimentation runoff, and erosion will be implemented 	TOWN	1,2,3	NOAA	All Construction Activities and Disturbance and Vehicle/Machinery Use Incorporate into SWPPP			

Mitigation Measure	Responsible Entity	Monitoring Triggers	Monitoring Entity	Compliance Action	Verification of Compliance		
					Initials	Date	Comments
<p>and remain in place at all times, including covering any stockpiled materials or soils and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and disturbed areas. Prior to the start of work, the contractor will develop a Storm Water Plan that identifies BMPs to be used in the construction area.</p> <ul style="list-style-type: none"> • If an unseasonal storm is anticipated, the contractor will cover (i.e., tarp) any stockpiled materials or soil and install silt fences, straw bale barriers, fiber rolls, or other structures around areas of ground disturbance. • No monofilament or other non-biodegradable materials will be used, and employed. BMP materials will be removed as soon as construction activities are complete. • During pipe removal and installation, the contractor will use a suction dredge to remove existing fill material covering the outfall diffuser pipe. The hydraulic suction dredge will be operated so that the intake is at or below the surface of the material being removed. • During dredging activity, the suction dredge may stir up fine particles. A secondary suction device will be 							

Mitigation Measure	Responsible Entity	Monitoring Triggers	Monitoring Entity	Compliance Action	Verification of Compliance		
					Initials	Date	Comments
<p>employed by a second diver to capture the suspended particles mobilized by the dredge. The secondary suction device will further minimize turbidity in the water column as the dredge operates.</p> <ul style="list-style-type: none"> • Turbidity will be maintained at levels below a 10 percent increase averaged over a 24- hour sampling period. The contractor will continuously monitor turbidity during dredging at two stations, located at mid-river in the channel approximately 80 feet upstream and 300 feet downstream from the dredge site. The monitoring station attendants will be in touch with the dive crew via radio and will notify the dredge operator if turbidity levels approach the 10 percent increase over 24-hour-averaging limit. If the monitor station attendant observes an increase at or above 10 percent over 24 hours, work will cease until the turbidity level returns to baseline. 							

C. Table 3.2

3.3.1 Monitoring Triggers*

- 1 Planning Stage (schematic design and design development)
- 2 Pre-Construction
- 3 Construction
- 4 Commencement of Operation
- 5 On-going through Project Operations

3.3.2 Responsible Entity

California Department of Fish and Game	(CDFG)
Town of Discovery Bay	(City)
California State Lands Commission	(CSLC)
Native American Heritage Commission	(NAHC)
Central Valley Regional Water Quality Control Board	(CVRWQCB)
United States Army Corp of Engineers	(USACE)
National Oceanic and Atmospheric Administration	(NOAA)
Tribal Entity	(TE)
Air Quality Management District	(AQMD)

4.1 REPORT CITATIONS

Bishop Diving & Salvage. 2017. Outfall inspection. Letter addressed to Mr. Virgil Koehne, Town of Discovery Bay. December 22, 2017.

Kleinfelder, Inc. 2004. Preliminary Geotechnical Services Report, Discovery Bay Outfall Diffuser in Contra Costa County, California.

Moore, D.S. 2003. Draft biological resources assessment for the wastewater treatment plant expansion project. Discovery Bay, California.

Notification of Lake or Streambed Alteration for the Town of Discovery Bay. 2004. Notification No. 1600-2004-0047-04.

Sadler, Berney. Plant Manager, Discovery Bay Wastewater Treatment Plant. Personal communication with Len Marino, Advisian. September 27, 2019.

5.1 REPORT PREPARATION

This EMMP was prepared for the Town of Discovery Bay, Public Works Division by Advisian Worley Group, Inc. The following individuals participated in the report preparation.

Advisian Worley Group, Inc.

Michele Santangelo, Senior Environmental Specialist

Len Marino, P.E., CFM, Senior Consultant

Loren Hettinger, Ph.D., Senior Environmental Specialist

Efrain Giron, Ph.D., P.Eng., Senior Water Resources Engineer, Project Manager

Town of Discovery Bay

Mike Yeraka, PE., Projects Manager

Aaron Goldsworthy, Water and Wastewater Manager

Gregory Harris, Town Engineer
