

Staff Report 65

APPLICANT:

West Bay Sanitary District

PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use

AREA, LAND TYPE, AND LOCATION:

Sovereign land in Westpoint Slough, adjacent to Assessor's Parcel Numbers 055-400-010, 170, and 490, near Menlo Park, San Mateo County.

AUTHORIZED USE:

Construction, use, and maintenance of an ecotone levee as part of the Flow Equalization and Resource Recovery Facility (FERRF) Levee Improvements and Bayfront Recycled Water Facility Project.

TERM:

20 years, beginning February 28, 2023.

CONSIDERATION:

The public use and benefit, 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 interests.

SPECIFIC LEASE PROVISIONS:

- Lessee agrees and acknowledges that the hazards associated with sea level rise may require additional maintenance or protection strategies regarding the improvements on the lease premises.
- Within 60 days of completing the construction of authorized improvements, Lessee will provide Lessor with photographs and 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 this Lease as necessary to accurately reflect the final location of the

authorized improvements. Once approved by 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 revised Exhibits shall be incorporated in this Lease as though fully set forth herein.

- Lessee shall place warning signage clearly visible from the shore and in the water both upstream and downstream of the construction site to provide notice of the construction and to advise the public to exercise caution.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6321, 6321.2, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

The West Bay Sanitary District (District) provides wastewater collection and conveyance services to the City of Menlo Park, Atherton, and Portola Valley, and areas of East Palo Alto, Woodside, and unincorporated San Mateo and Santa Clara counties.

The District's FERRF is a 20-acre parcel which contains three open air wastewater detention ponds with a capacity of approximately 23.6 million gallons of sewage. The FERRF also serves as a storage site for the District's materials and equipment, provides a nursery for Save the Bay, and encompasses an existing helipad. Plants such as Creeping Wild Rye, California Beeplant, and Western Goldenrod are grown at the nursery for bay restoration projects. The helipad is used by the County of San Mateo, the Coast Guard, and to perform rescue training for the Menlo Park Fire District. It is also used in conjunction with the San Francisco Estuary Invasive Spartina Project for invasive hybrid cordgrass removal. However, the FERRF primarily serves as a flow equalization facility for wastewater during high flow events (such as during storm events) when conveyance systems are not capable of transporting wastewater to the treatment plant and temporary storage of wastewater is needed. Bedwell Bayfront Park (Park) borders the east and south sides of the FERRF; Flood Slough is to the west; and Westpoint Slough and Greco Island, part of the Don Edwards National Wildlife Refuge, are to the north.

The FERRF is surrounded by earthen levees constructed in the late 1960s that are not Federal Emergency Management Agency (FEMA) certified. In 2017, the site flooded during a king tide event when the San Francisco Bay breached the levee and entered the site. In the event of a levee failure, up to 23.5 million gallons of raw

wastewater could spill into the adjacent sloughs and the San Francisco Bay, impacting threatened wildlife and habitat while damaging wastewater infrastructure.

The District is now applying for a General Lease – Public Agency use for the construction, use, and maintenance of an ecotone levee as part of the FERRF Levee Improvements and Bayfront Recycled Water Facility Project (Project). The Project's purpose is to: a) meet FEMA levee certification requirements; b) prevent sewage contamination of the San Francisco Bay that may also enter into and impact nearby communities, including underserved communities and those using the bay shoreline for recreation; c) allow migration of tidal marsh habitat under future sea level rise conditions to retain suitable habitat for special-status species in the San Francisco Bay; and d) increase the production of recycled water to address demand. The Project is partially funded by a National Fish and Wildlife Foundation (NFWF) grant.

The levee improvements include raising the levees to an elevation needed to address the FEMA 100-year floodplain and 50-year projected sea level rise with construction of sheet piles along the west side of the property and an approximately 2.3-acre ecotone levee on the north side, with approximately 0.75 acre of it extending into the Commission's jurisdiction in Westpoint Slough. An ecotone levee is a type of living shoreline structure designed to attenuate waves, provide high tide refuge for marsh wildlife (including special-status species such as the salt marsh harvest mouse, fish, and migratory birds), and allow room for marshes to migrate upslope with sea level rise.

Although the ecotone levee is designed to provide sea level rise resiliency for the aquatic habitats and listed species at the site, it would involve placement of fill and result in permanent impacts to tidal marsh and mudflat habitat. The Project would therefore create approximately 0.65 acre of new tidal marsh habitat adjacent to the proposed ecotone levee as compensatory mitigation. The Project would also locate the improvements within the FERFF site, as much as the site's capacity will allow, to minimize extension into Westpoint Slough.

The Project was analyzed by a number of state and federal regulatory agencies including U.S. Fish and Wildlife, U.S. Army Corps of Engineers, National Oceanic and Atmospheric Association, San Francisco Bay Conservation & Development Commission and the Regional Water Quality Control Board. The regulatory agencies, as well as the Citizens Committee to Complete the Refuge, expressed various concerns with the original project plan. The Applicant revised the original plan to address the concerns. The levee was moved as far upland as possible so the ecotone levee will not extend as far into the slough and a previously planned

reverse osmosis concentrate outfall was eliminated to reduce the impact to the wetland habitat. Greco Island, located on the opposite bank of Westpoint Slough and across from the Project site, has the highest and densest population of the federally-endangered Ridgway's Rail on the western side of South San Francisco Bay. Construction activities in and adjacent to the marsh habitat for the California Black Rail and California Ridgway's Rail would occur outside of the federally endangered birds' breeding season (January 15 through August 31); and a qualified biological monitor will be present during all construction activities within the marsh and vegetated areas, within 5 feet of the marsh, to look for special-status animals that may be impacted by construction.

Prior to construction of the ecotone levee, sheet pile cofferdams would be installed at low tide when there is little or no water in the slough to avoid stranding fish. The cofferdam will be removed to reopen the area to tidal action after the revegetation is inspected by a restoration ecologist. All construction activities will take place from the upland with the use of heavy equipment and are anticipated to last approximately 2 years.

The Project also includes installation of a new satellite recycled water facility at the upland site. The Bayfront Recycled Water Facility would increase the production of recycled water from 0.5 to 1.0 million gallons per day. The new system would require new influent and effluent pump stations and piping to transport the recycled water to customers. Pipeline alignments would primarily utilize existing street rights-of-way for installation.

Westpoint Slough, at this location, is shallow and not normally used for recreational boating. However, the public recreates along the slough using the Bedwell Bayfront Park Trail (Trail). A small section of the Trail would also be raised along with the levee and construction activities would require temporary closure of the Trail for up to 4 months, but the public could continue to use other trails within the Park during that time. A traffic control plan would be created to clarify and guide traffic, including pedestrian and bicyclists within the Park, and public rights-of-way during construction.

The Project provides local and statewide benefits by protecting against accidental discharge of wastewater into the neighboring communities, sloughs, and the San Francisco Bay during 100-year flood events and future sea level rise; and by creating habitat for endangered species that will remain after projected sea level rise. Protecting public health and enhancing habitat are generally consistent with the common law Public Trust Doctrine.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The lease is limited to a 20-year term and does not grant the

lessee exclusive rights to the lease premises. Upon termination of the lease, the lessee may be required to remove all improvements from State land.

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 Project is located in Westpoint Slough adjacent to the San Francisco Bay, 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 region 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 slough's inundation levels within the lease area. 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. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

The Project will create a wider upland transition zone, planted with native vegetation, between existing salt marsh habitat and levee on the north side of the project site. The proposed ecotone levee will provide higher quality native upland refugia habitat as well as a natural wildlife corridor. With a projected sea level rise of up to 1.9 feet by 2050 under a high emissions scenario, the majority of the existing salt marsh habitat on the north side of the FERFF will be permanently inundated (completely under water), resulting in a permanent loss of wetlands in just 30 years. Construction of an ecotone levee would mitigate for the permanent loss of wetlands from projected sea level rise.

Regular maintenance of the levee, as referenced in the lease, may reduce the likelihood of severe structural degradation. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland are located in an area that may be subject to the effects of climate change, including sea level rise.

CONCLUSION:

For all the reasons above, staff believes the issuance of this lease will not substantially impair the public rights to navigation and fishing or substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; is consistent with the common law Public Trust Doctrine; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application 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 trustee of the State's Public Trust lands as authorized by law. If the Commission denies the application, the Applicant may not conduct the proposed Project activities within lands under the Commission's jurisdiction. The lessee has no right to a new lease.
2. This action is consistent with the "Leading Climate Activism" and "Meeting Evolving Public Trust Needs" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
3. An EIR, State Clearinghouse No. 2020050414, and a Mitigation Monitoring and Reporting Program were prepared for this project by the District and certified on May 12, 2021. Commission staff reviewed these documents prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) (Public

Resources Code, § 21081.6) and adopted by the lead agency, and prepared an independent Mitigation Monitoring Program (attached, Exhibit C) incorporating the District's document and recommends its adoption by the Commission.

4. Findings made in conformance with the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15091) are contained in Exhibit D, attached hereto. 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 CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS REQUIRED:

San Francisco Bay Conservation and Development Commission
National Oceanic and Atmospheric Administration
California Department of Fish and Wildlife
Central Valley Flood Protection Board
Central Valley Regional Water Quality Control Board
U.S. Army Corps of Engineers

EXHIBITS:

- A. Land Description
- B. Site and Location Map
- C. Mitigation Monitoring Plan
- D. Statement of Findings

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an EIR, State Clearinghouse No. 2020050414, was prepared for this Project by the District and certified on May 12, 2021, and that the Commission has reviewed and considered the information contained therein.

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

Adopt the Findings, made in conformance with California Code of Regulations, title 14, sections 15091 and 15096, subdivision (h), as contained in the attached Exhibit D.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Determine that the Project, as approved, will not have a significant effect on the environment.

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:

1. Authorize issuance of a General Lease – Public Agency Use to the Applicant beginning February 28, 2023, for a term of 20 years, for the construction, use, and maintenance of an ecotone levee, as described in Exhibit A and shown on Exhibit B (for reference purposes only) attached and by this reference made a part hereof; consideration being the public use and benefit, 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.
2. Authorize the Executive Officer or designee to replace Exhibits in the lease as needed upon submission, review, and approval of site location descriptions following installation of the authorized improvements.

EXHIBIT A

A3559

LAND DESCRIPTION

A parcel of land situate in the City of Menlo Park, San Mateo County, State of California, being a portion of WestPoint Slough, deeded to the State of California as part of a Boundary Settlement and Exchange with Leslie Salt Company under SLL #43, which Slough is described as Parcel "G" in that certain deed, recorded in Book 5426 of Official Records at Page 109, as shown on that certain Parcel Map, filed for record in Book 7 of Parcel Maps at Page 44, both of San Mateo County Records, lying in projected Section 15, Township 5 South, Range 3 West, M.D.M., part of Swamp and Overflowed Lands Survey No. 104, and more particularly described as follows:

PARCEL 1 – Lease Area

BEGINNING at a point on the southwesterly line of said Slough, also being a point on the northerly line of Parcel "C", as shown on said map, to which the Northwesternly terminus of that course labeled North 47° 00' 52" West, 422.4 feet, as shown in said deed and shown on said map, bears North 47° 00' 52" West, 237.51 feet,

Thence leaving said southwesterly line the following thirteen (13) courses:

1. North 00° 21' 29" West, 105.34 feet;
2. North 60° 16' 14" East, 21.15 feet;
3. South 34° 00' 02" East, 92.56 feet;
4. South 70° 30' 49" East, 79.66 feet;
5. South 09° 33' 52" East, 78.98 feet;
6. South 42° 46' 57" East, 41.34 feet;
7. South 84° 43' 31" East, 128.82 feet;
8. South 65° 41' 21" East, 108.93 feet;
9. South 29° 00' 27" East, 227.43 feet;
10. South 62° 49' 11" East, 313.51 feet;
11. South 54° 41' 05" East, 151.96 feet;
12. South 42° 30' 07" East, 26.03 feet;
13. South 56° 45' 42" East, 134.12 feet to the Southwesterly line of WestPoint Slough as described in said deed and shown on said Parcel Map;

Thence along the southwesterly line of said Slough the following five (5) courses:

1. South 36° 23' 04" West, 70.80 feet;
2. North 77° 39' 39" West, 163.80 feet;
3. North 50° 29' 59" West, 745.20 feet;
4. North 56° 02' 07" West, 173.60 feet;

5. North 47° 00' 52" West, 184.89 feet to the **POINT OF BEGINNING**.

*Bearings are based on the California Coordinate System, NAD 83 Datum, Zone 3.
Distances are grid distances. Multiply by CSF of 1.000060 to get ground distances.*

END OF DESCRIPTION

Prepared August 11, 2022 by the California State Lands Commission Boundary Unit.



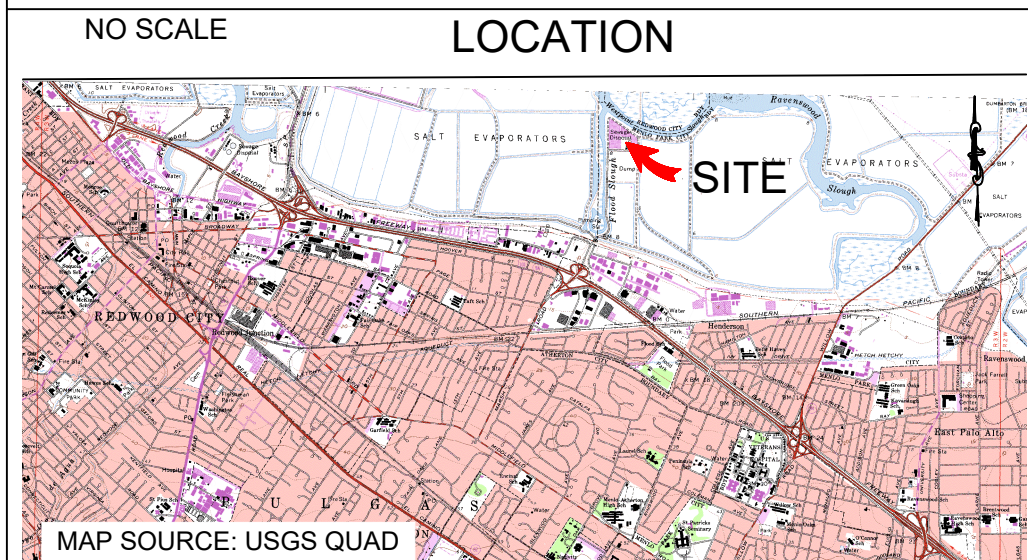
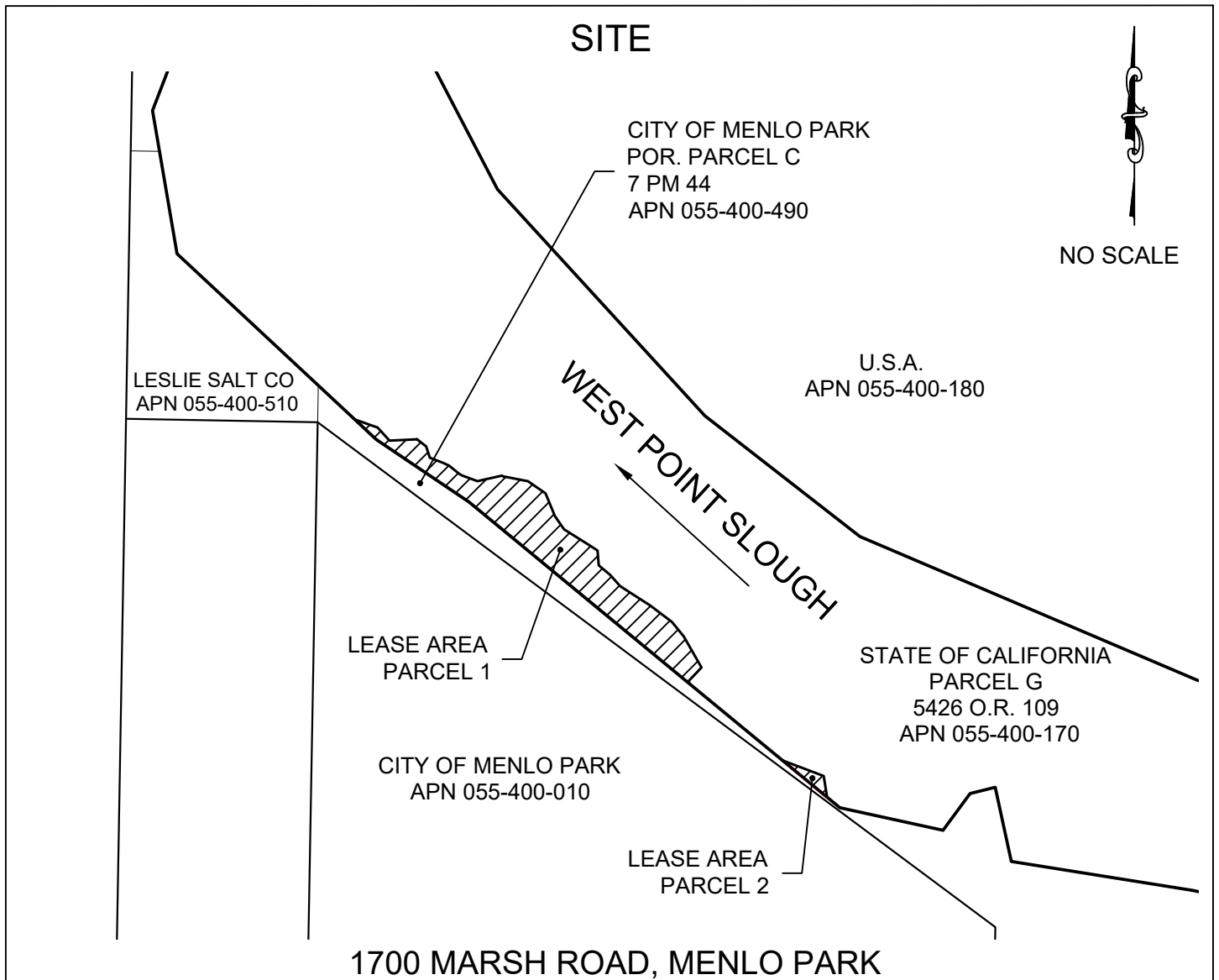
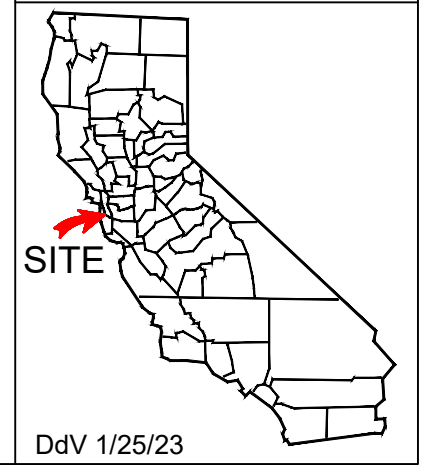


EXHIBIT B
A3559
WEST BAY SANITARY DIST.
APN 055-400-010
GENERAL LEASE -
PUBLIC AGENCY USE
SAN MATEO COUNTY



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.

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM
FLOW EQUALIZATION AND RESOURCE RECOVERY FACILITY LEVEE IMPROVEMENTS
AND BAYFRONT RECYCLED WATER FACILITY PROJECT.
(A3559, State Clearinghouse No. 2020050414)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the Flow Equalization and Resource Recovery Facility (FERRF) Levee Improvements and Bayfront Recycled Water Facility Project (Bayfront RWF or Project). The CEQA lead agency for the Project is the West Bay Sanitary District.

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 State 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:

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 certified an EIR, State Clearinghouse No. 2020050414, adopted a Mitigation Monitoring and Reporting Program (MMRP) for the whole of the Project (see Exhibit C, Attachment C-1), and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. 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 MMRP 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.

Table C-1. Project Impacts And Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM) ¹	Difference Between CSLC MMP and Lead Agency MMRP
BIO-1	BIO-1a, 1b	None
BIO-2	BIO-2a, 2b, 2c	None
BIO-3	BIO-3a to 3k	None
BIO-4	BIO-4	None
BIO-6	BIO-6a, 6b, 6d	None
BIO-7	BIO-7a, 7b	None
BIO-8	BIO-8	None
CUL-1	CUL-1a, 1b, 1c, 1d	None
GEO-1	GEO-1	None
GEO-2	GEO-2	See addition below

Addition to MM GEO-2: California State Lands Commission (Commission) staff shall be notified of any paleontological specimens discovered on lands under the jurisdiction of the Commission. The final disposition of any artifacts or specimens including, but not limited to, those of a paleontological nature from such lands must be approved by the Commission.

¹ See Attachment C-1 for the full text of each MM taken from the MMRP prepared by the CEQA lead agency.

ATTACHMENT C-1

MITIGATION MONITORING AND REPORTING PROGRAM ADOPTED BY THE WEST BAY SANITARY DISTRICT

Mitigation Monitoring and Reporting Program

**The West Bay Sanitary District
Flow Equalization & Resource Recovery
Facility Levee Improvements & Bayfront
Recycled Water Facility Project**



May 2021

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation, Monitoring and Reporting Program (MMRP) has been prepared pursuant to the CEQA Guidelines, which state:

“When adopting a final EIR with findings as required under 14 CCR section 15091(a)(1) the lead agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects” (§15097(a)) and;

“The Lead Agency may choose whether its program will monitor mitigation, report on mitigation, or both. “Reporting” generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. “Monitoring” is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both.” (§15097 (c))

The table beginning on the next page list the impacts, mitigation measures, and timing of the mitigation measure (when the measure will be implemented) related to the West Bay Sanitary District (District) Flow Equalization & Resource Recovery Facility (FERRF) Levee Improvements & Bayfront Recycled Water Facility (RWF) project. All mitigation measures listed here will be implemented by the District, or by the District’s appointees.

According to CEQA Guidelines section 15126.4 (a) (2), “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design.” Therefore, all mitigation measures as listed in this MMRP will be adopted by the District when the project is approved.

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Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
Impact AES-1: The project proposes the removal two trees at the IPS site which is noted as a view corridor in Menlo Park's Land Use Element.	Mitigation Measure AES-1: Replacement Landscaping. The District shall provide replacement landscaping trees for any trees removed as part of the project. Placement/location and species of the replacement landscaping will be designed so that adequate sight distance for turning vehicles at the intersection of Bayfront Expressway and Marsh Road is maintained.	Implementation: The District shall prepare replacement landscaping plans as part of the project's final design plans and specifications. Timing: Prior to completion of the final design plans and specifications.	Monitoring: The District. Initials: _____ Date: _____
Impact AES-2: Implementation of the proposed project could result in new sources of light and glare that could affect day or night-time views in the project area.	Mitigation Measure AES-2: Exterior Lighting. To avoid and minimize light spillage and glare from exterior light fixtures, the District shall, to the maximum extent feasible: <ul style="list-style-type: none"> • Mount light fixtures as low as possible and orient the fixtures away from adjacent land uses • Equip all exterior light fixtures with shields, hoods, or guards that direct light down towards the ground surface • Use the minimum number of fixtures and minimum lighting levels necessary to provide sufficient security lighting 	Implementation: The District shall review proposed lighting plans in the project plans and specifications to ensure it is consistent with this mitigation measure. Timing: Prior to completion of the final design plans and specifications.	Monitoring: The District. Initials: _____ Date: _____
Impact BIO-1: The proposed project	Mitigation Measure BIO-1a: Pre-Activity Surveys for Special-Status Plants. Prior to initial ground disturbance in grassland and wetland	Implementation: Qualified biologist	Monitoring: The qualified biologist

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p>may result in significant impacts to special-status plants due to disturbance or destruction of individuals or suitable habitat.</p>	<p>habitats and during the appropriate blooming period (Coastal marsh milkvetch and Point Reyes bird's-beak, June–October; Congdon's tarplant, May–November; saline clover, April–June), a focused survey for these four potentially occurring special-status plant species will be conducted by a qualified botanist in accordance with the <i>Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities</i> within suitable habitat in the project footprint and a 50-foot buffer around the project footprint. The purpose of the survey is to assess the presence or absence of the potentially occurring species. If none of the target species are found in the impact area or the buffer, then no further mitigation is required. If Point Reyes bird's-beak, Coastal marsh milkvetch, Congdon's tarplant, or saline clover individuals are found in the impact area, then Mitigation Measure BIO-1b will be implemented. The results of the survey will be documented, and all rare plant discoveries shall be reported to CDFW's California Natural Diversity Database.</p> <p>Mitigation Measure BIO-1b: Avoidance Buffers. The project proponent, in consultation with a qualified plant ecologist, will take measures to protect all populations of special-status plant species found to occur within the project site or within 50 feet of the impact area. Avoided special-status plant populations will be protected by establishing and observing the identified buffer between plant populations and the impact area. All such populations located in the impact area or the buffer, and their associated designated avoidance areas, will be clearly depicted on any construction plans. In addition, prior to initial ground disturbance or vegetation removal, the limits of the buffer around special-status plants to be avoided and will be flagged or fenced. The flagging will be maintained intact and in good condition throughout project-related construction activities.</p> <p>If complete avoidance is not feasible, then the appropriate resource agencies will be consulted to determine the appropriate measures to take, which may include salvage of seeds and/or plants, relocation of individual plants, and/or off-site preservation, enhancement, and management of occupied habitat for the species.</p>	<p>(Mitigation Measure BIO-1a) and construction workers under supervision of a qualified biologist (Mitigation Measure BIO-1b).</p> <p>Timing: Prior to start of construction activities during appropriate bloom periods.</p>	<p>shall prepare a memo or letter report documenting the methods and results of the special-status plant surveys to be submitted to the District. If Mitigation Measure BIO-1b is required, the District or its contractor will maintain the avoidance buffers under the supervision of a qualified biologist, and this complete measure shall be incorporated into the project specifications, bid, and contract documents. If avoidance is not feasible, the District will consult with CDFW to determine the</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
			<p>appropriate mitigation measures.</p> <p>Initials: _____</p> <p>Date: _____</p>
<p>Impact BIO-2: The proposed project could harm special-status species, degrade surface or ground water quality, and will result in both permanent and temporary impacts to aquatic and marsh habitat during construction of the ecotone levee.</p>	<p>Mitigation Measure BIO-2a: Biological Monitoring During Construction in the Marsh. A qualified biological monitor will be present during all construction activities within the marsh or in vegetated areas within five (5) feet of the marsh to look for special-status animals that may be impacted by construction. For example, when construction personnel need to install the ecotone levee coffer dam and remove vegetation, the biological monitor will first inspect the vegetation to determine whether any salt marsh harvest mice, salt marsh wandering shrews, or other special-status species are present. If any animals are present, they will be allowed to leave the area on their own, or the location of the in-marsh work will be adjusted to ensure that no impacts to special-status species occur. The biologist shall have stop-work authority if any special-status species is detected in an area where it may be injured or killed by construction activities. In the event that special-status species are found within or directly adjacent to the project site, a qualified biologist shall identify an appropriate no-disturbance buffer to be implemented. The results of the monitoring will be documented. If directed by the agency approved biological monitor, Mitigation Measure BIO-2b will be implemented. If directed by the approved biological monitor, Mitigation Measure BIO-3h (exclusion fencing) will be implemented. The biological monitor will also ensure that Mitigation Measures BIO-3a through k are implemented as necessary to protect special-status species. Any discoveries of special-status species shall be reported to CDFW's California Natural Diversity Database.</p> <p>Mitigation Measure BIO-2b: Installation of Sheet Piles, Dewatering Plan, and Relocation of Stranded Fish. Sheet pile cofferdams to be</p>	<p>Implementation: Construction workers under the supervision of a qualified biologist (Mitigation Measure BIO-2a). A qualified biologist will relocate fish (Mitigation Measure BIO-2b). The District or its contractor will implement measures to protect water quality (Mitigation Measure BIO-2c).</p> <p>Timing: Dewatering and relocation of fish will occur prior to construction</p>	<p>Monitoring: A qualified biologist shall prepare a fish relocation plan to be submitted and approved by NMFS, and a separate memo or letter report documenting the results of fish relocation efforts to be submitted to the District and NMFS. The District or its contractor will maintain measures to protect water quality. The text of Impact BIO-2 and mitigation measures BIO-2a through BIO-2d</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>installed prior to construction of the ecotone levee shall be installed at low tide when there is little or no water in the slough to avoid stranding fish. An agency approved dewatering plan shall be implemented if water deep enough to support fish remains within the ecotone levee work area once the sheet pile cofferdam is installed. If necessary, as the cofferdams are being placed, a qualified biologist will relocate any stranded fish to suitable habitat outside of the work area. The method of relocation will be determined by the qualified biologist, in consultation with NOAA Fisheries and/or CDFW (as appropriate), based on site conditions and species present. Implementation of this measure will avoid loss of fish due to stranding. The methods and results of fish relocation efforts will be documented. Discoveries of special-status fish species shall be reported to NOAA Fisheries and/or CDFW and entered into CDFW's California Natural Diversity Database (as appropriate).</p> <p>Mitigation Measure BIO-2c: Measures to Protect Water Quality. During all construction in and near tidal aquatic habitat, standard BMPs will be used to minimize erosion and impacts to water quality as well as direct impacts to special-status fish. These are reported in the EIR and will be included in the SWPPP prepared for the project. Compliance measures that protect water quality help reduce potential impacts to biological resources to less than significant.</p> <p>Mitigation Measure BIO-2d: Noise Minimization. As a Best Management Practice to minimize noise impacts, the sheet piles shall be installed using a soft-start method by pausing after the first 15 seconds at a reduced energy twice before vibrating the sheet piles in at full capacity.</p>	<p>activities in tidal aquatic habitat (Mitigation Measures BIO-2a and BIO-2b). Measures to protect water quality will occur for the duration of construction activities near tidal habitat (Mitigation Measure BIO-2c).</p>	<p>shall be incorporated into the project specifications, bid and contract documents.</p> <p>Initials: _____</p> <p>Date: _____</p>
<p>Impact BIO-3: The proposed project could harm salt marsh harvest mouse and salt marsh wandering shrew, and will</p>	<p>Mitigation Measure BIO-3a: Worker Environmental Awareness Training. A resource agency approved biologist will prepare a worker environmental awareness fact sheet with 1) the description and status of the species; 2) the habitat of the species; 3) the legal ramifications of impacting the species; 4) a list of measures being taken to reduce impacts on these species during project construction (including preconstruction surveys, minimizing trash that attracts predators, and other measures); and</p>	<p>Implementation: Construction workers under the supervision of a qualified biologist (Mitigation</p>	<p>Monitoring: A qualified biologist will submit the signed acknowledgment forms from the worker</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p>result in both permanent and temporary impacts to tidal and upland habitats during construction of the ecotone levee. Additionally, if the proposed project includes the installation of lighting that illuminates marsh habitat and the adjacent levees, such lighting could potentially have adverse effects on special-status species in the wetlands and adjacent levee refugia habitat.</p>	<p>5) what to do if the species are encountered. All construction personnel working on the site and in the pipeline alignments and pump station areas adjacent to wetlands will participate in a worker environmental awareness training conducted by a resource agency approved biologist, and will sign an acknowledgment that they have participated in the worker environmental awareness training.</p> <p>Mitigation Measure BIO-3b: No Pets. No pets (e.g., dogs or cats) will be brought to the project site to avoid harassment, killing, or injuring of wildlife.</p> <p>Mitigation Measure BIO-3c: Food Trash Removal. To minimize attraction of predators such as racoons and feral cats all workers will be required to secure their food related trash and remove it daily. The site foreman shall assure that all food trash related to the construction work is secured and removed.</p> <p>Mitigation Measure BIO-3d: Minimize Non-daylight Work; Prepare Lighting Plan. Project lighting during construction activities shall be limited in consideration of the potential impacts to special status species. If early morning, early evening, or night lighting is necessary during construction, a lighting plan shall be prepared in consultation with an agency approved biologist. 24-hour work that requires night lighting shall only be conducted with approval from the US Fish and Wildlife Service and the California Department of Fish and Wildlife due to potential impacts to species protected under FESA and CESA. See also Mitigation Measure BIO-3i Artificial Lighting regarding permanent site lighting.</p> <p>Mitigation Measure BIO-3e: Work During Extreme High Tides. To avoid the loss of individual salt marsh harvest mice and salt marsh wandering shrew that may shelter in the work area during extreme high tides, an agency approved biological monitor shall be present when work around the perimeter of the FERRF site occurs during extreme high tides, such as King Tides. The agency approved biological monitor shall complete a pre-construction survey prior to construction activities in these areas. Areas within the cofferdam or wildlife exclusion fence are expected to exclude mice and shrews and would not require a pre-construction survey. Also</p>	<p>Measures BIO-2a, BIO-3a, BIO-3e, BIO-3f, BIO-3g and BIO-3h. The District or its contractor (Mitigation Measures BIO-3b, BIO-3c, BIO-3d, BIO-3i, BIO-3j). The text of impact BIO-3 and the above listed mitigation measures (2a, 3a, 3 b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, and 3j) shall be incorporated into the project specifications and contract documents.</p> <p>Timing: Prior, during, and after construction activities near tidal marsh and adjacent upland habitats.</p>	<p>environmental awareness program to the District (Mitigation Measure BIO-3a). The District or its contractor will maintain the exclusion fence (Mitigation Measure BIO-3h). The district will ensure that low-intensity lighting, downcast lighting, or other appropriate lighting technology will be incorporated into the project design and this shall be shown on construction drawings (Mitigation Measure 3i).</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>see measure BIO-4 for California Ridgway's rail and California black rail measures at extreme high tide.</p> <p>Mitigation Measure BIO-3f: Limit Vegetation Removal. To avoid the loss of individual harvest mice and wandering shrews from any excavation, fill, or construction activities in suitable habitat, vegetation removal will be limited to the minimum amount necessary.</p> <p>Mitigation Measure BIO-3g: Vegetation Removal Methods. Vegetation removal will occur under the supervision of a qualified biologist as noted in Mitigation Measure BIO-2a. The vegetation shall be removed with hand tools (e.g., weed-eater, hoe, rake, trowel, shovel) on a progressive basis, such that it allows species to find adjacent cover. The qualified biologist shall monitor the rate of vegetation removal to ensure that any harvest mice or wandering shrews present are able to escape to cover that will not be impacted, and will specify whether vegetation needs to remain in a certain area temporarily to facilitate dispersal of mice/shrews into habitat outside of the impact area.</p> <p>Mitigation Measure BIO-3h: Exclusion Fence. Following the hand-removal of vegetation, exclusion fencing will be erected around the outer boundary of the work area that is adjacent to harvest mouse/wandering shrew habitat that is to remain intact, if the cofferdam design does not exclude species. If the cofferdam excludes the species additional exclusion fencing is not necessary. This will define and isolate protected harvest mouse habitat. The installation of the fence will be supervised by a qualified biologist. This fencing will consist of heavy plastic sheeting or metal material that cannot be climbed by harvest mice, buried at least 4 inches below the ground's surface, and with at least 1 foot (but no more than 4 feet) above the ground. All supports for the fencing will be placed on the inside of the work area. A 2-foot buffer will be maintained free of vegetation around the outside of the exclusion fencing. The fencing will be inspected daily during the project construction period, and any necessary repairs will be made within 24 hours of when they are found. If any breaks in the fencing are found, the qualified biologist will inspect the work area for salt marsh harvest mice and salt marsh wandering shrews. If any individuals are found, all work that could impact these individuals will cease</p>		

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>until the individuals have left the impact area on their own. If an injured or killed mouse is discovered at any time during project activities, all work shall cease immediately and USACE/USFWS/CDFW shall be contacted for further direction.</p> <p>Mitigation Measure BIO-3i: Artificial Lighting. During and after project construction, the spillover of lighting into the salt marsh habitat and adjacent levees will be minimized using low-intensity lighting or other appropriate low-dispersion lighting technology; orientation of lights so that they are placed on the perimeter of the work area and directed inward (rather than directing any lighting toward the marsh) and downward toward the ground; and shielding of lights from behind. Low-intensity lighting, downcast lighting, or other appropriate lighting technology will be incorporated into the project design where permanent lighting is to be placed within 200 feet of the salt marsh to reduce potential adverse effects on animals within this habitat.</p> <p>Mitigation Measure BIO-3j: Prohibition of Plastic Monofilament Netting. Monofilament plastic netting, including in temporary and permanent erosion control measures (such as straw wattles), shall not be used, regardless of whether the netting is biodegradable or not. Burlap or jute wrapped straw wattles are acceptable.</p> <p>Mitigation Measure BIO-3k: Monitoring and Adaptive Management Plan. The project shall include a plan to restore and monitor natural habitats impacted by the project, particularly the ecotone levee area. At a minimum the plan shall be submitted in the permit package to the U.S. Army Corps of Engineers required under Section 404 of the Clean Water Act and the permit package to the Regional Water Quality Control Board under Section 401 of the Clean Water Act for agency review.</p>		
<p>Impact BIO-4: The proposed project could harm California black rail and California</p>	<p>Mitigation Measure BIO-4: Pre-Construction/Pre-Disturbance Survey for California Black Rail and California Ridgway's Rail. Construction activities in and adjacent to the marsh habitat for rails shall occur outside of the breeding season (January 15-August 31), as a first measure. If construction activities are planned to occur within or adjacent to tidal marsh</p>	<p>Implementation: A qualified biologist(s) will submit the proposed survey</p>	<p>Monitoring: A qualified biologist shall prepare a letter report documenting the</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p>Ridgway's rail, and will result in both permanent and temporary impacts to tidal and upland habitats during construction.</p>	<p>or suitable rail habitat during the breeding season, a qualified biologist shall contact the Invasive Spartina Project to determine if protocol surveys are already being conducted in the area so that a) the data can be used, and b) rails are not adversely affected by repeated protocol surveys. If the Invasive Spartina Project is not conducting protocol surveys, then a qualified biologist shall conduct the USFWS-approved protocol level surveys for California black rail and Ridgway's rail before initiation of any ground disturbing activities within the salt marsh habitat and a 700-foot buffer (i.e., Wood 2017 "Site-specific Protocol for Monitoring Marsh Birds"). Protocol surveys are required to be completed over several visits between January 15 and April 15, and may significantly impact the construction schedule if they have not been completed in time. The qualified biologist shall be approved to conduct the current USFWS-sanctioned survey methodology (Wood 2017). The qualified biologist shall submit the proposed survey methods to CDFW and USFWS for review and approval prior to commencing the surveys. The results of the survey will be documented, and any detections will be reported to the California Natural Diversity Database.</p> <p>If an active nest is found within the survey area, the qualified biologist shall consult with CDFW and USFWS to determine the appropriate construction-free buffer zone (typically 700 feet) and/or other mitigation measures to be implemented, such as daily monitoring. If no rail call centers or nests are found within 700 feet of project construction activities, work can proceed. If work extends into additional seasons, then additional protocol surveys shall be completed, particularly if work has paused.</p> <p>If California Ridgway's rail or black rail are present, the following measures also apply:</p> <ul style="list-style-type: none"> To avoid impacts to individual rails, activities within or adjacent to habitat will not occur within two hours before or after extreme high tides (6.5 feet or above as measured at the Golden Gate Bridge), when the marsh is inundated and rail movement may be altered. If the work area is protected by a cofferdam or wildlife exclusion fence and rails are not likely to be present within the buffer zone, the work can continue with a biological 	<p>methods to CDFW and USFWS and perform the pre-construction surveys. Construction workers under the supervision of a qualified biologist will establish buffers, if needed.</p> <p>Timing: Prior to construction activities and during construction activities if buffers are needed.</p>	<p>results of the survey. The District or its contractor will maintain any needed avoidance buffers under the supervision of a qualified biologist. The text of Impact BIO-4 and Mitigation Measure BIO-4 shall be incorporated into the project specifications and contract documents.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>monitor present, but shall be halted if a rail is detected within the buffer zone.</p> <ul style="list-style-type: none"> If a California Ridgway's rail or black rail nest or adult is encountered during any project-related activity, the observer(s) shall immediately move away from the nest/adult. 		
<p>Impact BIO-5: The proposed project could harm burrowing owls, and impact potential nesting, roosting, and foraging habitats during construction.</p>	<p>Mitigation Measure BIO-5a: Conduct Pre-construction Surveys for Burrowing Owls. Pre-construction surveys for burrowing owls will be conducted prior to the initiation of all project activities within suitable burrowing owl nesting and roosting habitat (i.e., grassland habitat and levees with burrows of California ground squirrels). Pre-construction surveys will be completed in conformance with Appendix D: <i>Breeding and Non-breeding Season Surveys</i> of the CDFW Staff Report on Burrowing Owl Mitigation (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843) (CDFG 2012), which specify the timing, area, and number of surveys. The results of the survey shall be documented, and positive sightings submitted to the California Natural Diversity Database.</p> <p>Mitigation Measure BIO-5b: Implement Buffer Zones for Burrowing Owls. If burrowing owls are present on or near the construction site a buffer zone will be maintained around the occupied burrow(s) in accordance with guidance provided in the CDFW Staff Report cited above. The buffer will be large enough to avoid injury or mortality of individual owls in compliance with Fish and Game Code section 3503.5. The recommended buffer zones range from 50 meters to 500 meters depending on the level of construction activity. The appropriate buffer zone will be determined by a qualified biologist.</p> <p>Mitigation Measure BIO-5c: Monitor Owls During Construction. Although owls occupying the study area are likely habituated to frequent human disturbance due to regular activity at the project site and in nearby Bedwell Bayfront Park, and may tolerate greater levels of human disturbance than owls in more natural settings, a qualified biologist shall monitor owl behavior during construction. If in the opinion of the qualified</p>	<p>Implementation: A qualified biologist will perform the pre-construction surveys (Mitigation Measure BIO-5a, and/or BIO-5c). Construction workers under the supervision of a qualified biologist will establish buffers, if needed (Mitigation Measure BIO-5b).</p> <p>Timing: Prior to construction activities and during construction if buffers and</p>	<p>Monitoring: A qualified biologist shall prepare a memo or letter report documenting the results of the survey and monitor any nesting owls (Mitigation Measures BIO-5a and BIO-5c). The District or its contractor will maintain any needed avoidance buffers under the supervision of a qualified biologist (Mitigation Measure BIO-5b). The text of Impact BIO-5 and Mitigation Measures BIO-</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>biologist, the owls are disturbed to the point of harm or possible reduced reproductive success, all work within at least 50 meters of the occupied burrow will cease until the burrow is determined by a qualified biologist to no longer be in active use, or the biologist in consultation with resource agencies has determined what work can proceed without causing harm or reduced reproductive success to the owl(s).</p> <p>Mitigation Measure BIO-5d: Restoration of Burrowing Owl Habitat On Site. If pre-construction surveys identify that burrowing owl actively nests in the project footprint, the burrow shall not be removed until nesting is completed for the season, the burrow is not occupied by owls, and artificial burrow(s) are provided within 100 meters of the original burrow.</p>	monitoring are needed.	<p>5a, 5b, and 5c shall be incorporated into the project specification and contract documents.</p> <p>Initials: _____</p> <p>Date: _____</p>
<p>Impact BIO-6: The proposed project could result in temporary and permanent impacts to Alameda song sparrow, American peregrine falcon, black skimmer, Bryant's savannah sparrow, California brown pelican, California least tern, loggerhead shrike, northern harrier, San Francisco common yellowthroat, short-eared owl, western snowy plover, white-tailed kite, and other</p>	<p>Mitigation Measure BIO-6a: Pre-Construction/Pre-Disturbance Surveys for Nesting Birds.</p> <p>Avoidance. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in San Mateo County extends from February 1 through September 15.</p> <p>Pre-Construction Surveys. If it is not possible to schedule construction activities between September 15 and January 31, then preconstruction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys will be conducted no more than five days prior to the initiation of any site disturbance activities and equipment mobilization in the project area as well as the right of ways for the distribution pipelines and the influent pump station. If project activities are delayed by more than five days, an additional nesting bird survey will be performed. During this survey, the biologist will inspect all potential nesting habitats (e.g., shrubs, developed areas, structures, etc.) in and immediately adjacent to the impact area for nests. Active nesting is present if a bird is building a nest,</p>	<p>Implementation: A qualified biologist will perform the pre-construction surveys and nest monitoring, if needed (Mitigation Measures BIO-6a and BIO-6b). Construction workers under the supervision of a qualified biologist will establish buffers, if needed (Mitigation Measure BIO-6b). The District</p>	<p>Monitoring: A qualified biologist shall prepare a memo or letter report documenting the results of the surveys and any needed nest monitoring (Mitigation Measures BIO-6a and BIO-6b). The District or its contractor will maintain any needed avoidance buffers under the supervision of a qualified biologist</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p>nesting birds protected by the MBTA and California Fish and Game Code. Glass in new buildings could increase collision hazard causing injury or death for these species. Open topped posts with bolt holes could entangle raptor talons and result in mortality.</p>	<p>sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys will be documented.</p> <p>Mitigation Measure BIO-6b: Nesting Bird Protection. If an active nest is found sufficiently close to work areas to be disturbed by project activities, the qualified biologist will determine the extent of a construction-free buffer zone to be established around the nest (typically up to 1000 feet for raptors and up to 250 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. The qualified biologist shall be experienced in both songbird and raptor behavior. Identified active nests will be surveyed one day prior to any construction-related activities to establish a behavioral baseline for the adults and any nestlings. Once work commences, all active nests will continue to be monitored by the qualified biologist to detect any signs of disturbance and behavioral changes caused by project activities, and change the buffer as needed to prevent disturbance-related nest failure. The qualified biologist will have authority to order the cessation of all project activities within disturbance distance of any raptor nest if the birds exhibit abnormal nesting behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young). Within the buffer zone, no site disturbance and mobilization of heavy equipment, including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition, and grading will be permitted until the chicks have fledged. Monitoring will be required to ensure compliance with MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings will be documented.</p> <p>Mitigation Measure BIO-6c: Reduce Collision Hazard. The project design shall comply with measures such as those identified in Menlo Park Municipal Code Chapter 16.43.140 (6) to minimize the number of bird collisions with new buildings and reduce bird collision hazard to a less than significant impact.</p> <p>Mitigation Measure BIO-6d: Cap Open-topped Posts/Fill Bolt Holes. All fence posts, property line stakes, signs, etc. that are open topped and have bolt holes shall be capped and the bolt holes filled to prevent</p>	<p>will assure compliance with measures BIO-6c and BIO-6d.</p> <p>Timing: Surveys for nesting birds will be conducted within 5 days prior to the start of construction.</p>	<p>(Mitigation Measure BIO-6b). Project plans shall include specifications that require implementation of measures BIO-6c and BIO-6d.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	entanglement of birds of prey. This measure shall be included in project specifications.		
<p>Impact BIO-7: The proposed project could result in the introduction or spread of invasive plants, which can displace native marsh vegetation and reduce habitat quality of the salt marsh by reducing refugia and foraging habitat for native species, including special-status species.</p>	<p>Mitigation Measure BIO-7a: Integrate Invasive Plant Management into the Ecotone Levee Restoration Plan. Prior to the start of construction activities, measures to control invasive plant species shall be specified and integrated with the Monitoring and Adaptive Management Plan (Plan) for the ecotone levee restoration, with the purpose of protecting restoration areas from being significantly impacted by invasive weeds. Invasive plant removal in the salt marsh and on the adjacent levees shall be limited to hand tools as specified in Measure BIO-3h and shall be removed before grading starts. If specified in the Plan for the restoration area, invasive species management will extend into developed areas of the parcel as needed to protect the restoration area.</p> <p>Mitigation Measure BIO-7b: Construction Measures to Minimize Invasive Plant Infestations. The following measures shall be taken during construction to minimize invasive plant infestation and potential impacts of invasive plants on adjacent natural habitats, particularly the wetlands:</p> <ul style="list-style-type: none"> • All ground disturbing equipment used adjacent to native habitats will be washed (including wheels, tracks, and undercarriages) both before and after being used at the site. Worker personal gear, including boots, should also be cleaned and clear of plant material prior to entering the work area. • All seeds and straw materials used on site shall be weed-free rice straw, and all gravel and fill material shall be certified weed free. • The project will follow a Stormwater Pollution Prevention Plan as per the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ), to reduce stormwater runoff which can carry the seed of invasive plants to other locations. 	<p>Implementation: The District or its contractor, working with a qualified plant ecologist.</p> <p>Timing: Prior to construction activities and during construction.</p>	<p>Monitoring: Proof of invasive species removal in as-builts or a memo prepared by a biologist or restoration ecologist. Mitigation Measure BIO-7b shall be incorporated into project specifications and contract documents.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<ul style="list-style-type: none"> All disturbed soils within sensitive habitats and adjacent levee slopes will be stabilized and planted in accordance with a restoration plan prepared for the project as part of an approved ecotone levee project. <p>Soil and vegetation removed from weed-infested areas will not be used in general soil stockpiles and will not be redistributed as topsoil cover for the newly filled areas. All weed-infested soil will be disposed of off-site at a landfill or buried at least 2.5 feet below final grade.</p>		
<p>Impact BIO-8: The proposed project will result in both temporary and permanent impacts to jurisdictional waters and sensitive communities from the construction of the ecotone levee, installation of sheet piles along a section of existing levee, the discharge of stormwater runoff into an existing swale that discharges to the bay, and the disposal of the remainder effluent from the RO process into the bay.</p>	<p>Mitigation Measure BIO-8: Water Quality Monitoring Plan. The West Bay Sanitary District will develop a water quality monitoring plan in consultation with the EPA, which will consult with NMFS. The water plan will include an impact assessment, water quality standards and protections of those standards, monitoring methodology, and reporting requirements. The goal of the plan is to ensure that the discharge from the water recycling facility complies with the discharge requirements set by the regulatory agencies to protect Bay waters. Depending on the requirements of the regulatory agencies, the plan may include, for example, quarterly surface and effluent water monitoring for suspended solids, settleable solids, ammonia, pH, and temperature. If required, the water quality monitoring plan will be submitted as part of the NPDES permit package.</p>	<p>Implementation: The District or its contractor will prepare a water quality monitoring plan in consultation with the U.S. EPA.</p> <p>Timing: The District or its contractor will submit a water quality monitoring plan as part of the permit applications to the regulatory agencies prior to construction.</p>	<p>Monitoring: The District or its contractor will implement the monitoring conditions in an agency-approved water quality monitoring plan.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p>Impact CUL-1: Project construction could cause potential disturbance of previously unknown prehistoric, archaeological, or tribal cultural resources, or human remains, during project construction.</p>	<p>Mitigation Measure CUL-1a: Inadvertent Discovery. In the event archaeological resources are unearthed, all soil disturbing work shall be halted within 60 feet of any discovery. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology and is familiar with Bay Area archaeology must be contacted and the requirements under 36 CFR 800.13 followed. Work shall not commence in the vicinity of the inadvertent discovery until a qualified archaeologist completes a significance evaluation of the find(s) pursuant to Section 106 of the National Historic Preservation Act (36 CFR 60.4). If artifacts are found during construction, construction worker training shall be provided to all crews doing earthwork/soil moving activities.</p> <p>If a newly discovered resource is, or is suspected to be, Native American in origin, a geographically and culturally affiliated Native American cultural monitor will be retained, as directed by the Native American Heritage Commission (NAHC).</p> <p>If archaeological resources are found on the northwestern segment of the project site (pipeline alignments in Chilco Street, Constitution Drive, Bayfront Expressway crossing, Marsh Road, and IPS) archaeological monitoring will be instigated for those segments. No further ground disturbing work shall be allowed to continue until the archaeologist has fully evaluated the find and approves work to continue. Dependent on the evaluation by the archaeologist, archaeological excavation and recordation may be required before construction can continue. An Archaeological Resource Treatment Plan (ARTP) will be written in consultation with the District.</p> <p>The District shall consult with the State Lands Commission Attorney should any cultural resources on State lands be discovered during the construction of the project. The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission.</p>	<p>Implementation: West Bay Sanitary District and its Contractors.</p> <p>Timing: Prior to the start of project construction and ongoing throughout ground moving activity.</p>	<p>Monitoring: The District shall ensure mitigation measure language is placed on all construction bid and construction documents. The archaeologist shall, if applicable, prepare a written record of survey results, archaeological discovery, and evaluation methodology to be submitted to the District and the Northwest Information Center. The Native American monitor shall, if applicable, record tribal resources for submittal to the Native American Heritage Commission.</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>Mitigation Measure CUL-1b: Tribal Resources. It is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and thus considered a significant resource under CEQA, even if it would not otherwise be considered significant under CEQA. As such, all Native American artifacts (tribal finds) or other Tribal Cultural Resources shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 until the lead agency in consultation with the appropriate Tribe has enough evidence to make a determination of significance. Unanticipated discoveries shall be reburied on site. If they cannot be reburied on site, they shall be returned to Tribal custody. Ownership/custody of Native American artifacts, materials, and resources collected from State-owned lands under the jurisdiction of the State Lands Commission shall be returned after evaluation to the culturally affiliated Tribe whenever possible, regardless of significance.</p> <p>Mitigation Measure CUL-1c: Human Remains. The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are unearthed during construction, the County Coroner will be notified immediately, and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). All applicable laws pertaining to the discovery of human remains will be followed.</p> <p>Mitigation Measure CUL-1d: Plan Details. All project plans shall clearly state that ground disturbing activities have the potential for the discovery of human remains.</p> <p>Mitigation Measure CUL-1e: Construction Monitoring on Hamilton Avenue. Archaeological and Native American monitoring shall be instigated for all ground disturbing activities along the Hamilton Avenue section of the recycled water distribution pipeline. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology and</p>		<p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>familiar with San Francisco Bay Area archaeology and a Native American cultural monitor familiar with Bay Area Tribes shall be present at the project site during ground disturbing activities, including machine or hand excavation. No ground disturbing activities, with the exception of road surface removal, shall be allowed to take place if the archaeologist and Native American monitor are not present. An archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased.</p> <p>Mitigation Measure CUL-1f: Toothless Buckets. All excavator machinery on Hamilton Avenue shall use toothless buckets during ground disturbing activity to allow the monitoring archaeologist to more clearly identify archaeological features, if present.</p> <p>Mitigation Measure CUL-1g: Cultural Resource Sensitivity Training shall be provided to construction crews that disturb areas of native soil during construction."</p>		
<p>Impact GEO-1: The project has the potential to create or exacerbate existing conditions related to seismic ground shaking, seismic-related ground failure, slope stability, and expansive soils.</p>	<p>Mitigation Measure GEO-1: Geotechnical Engineering Investigation. A site-specific Geotechnical Engineering Investigation shall be prepared for the project and all recommendations shall be included in project plans and specifications.</p>	<p>Implementation: The District shall prepare a site-specific geotechnical investigation for the project and all recommendations shall be included in the project's final design and plans and specifications.</p>	<p>Monitoring: The geotechnical engineering investigation report shall be submitted to the District for review.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
		Timing: The report shall be prepared in advance of the final design plans and specifications.	
Impact GEO-2: Project construction could unearth paleontological resources, including fossils.	Mitigation Measure GEO-2: Paleontological Resources. If paleontological resources are discovered during construction, ground-disturbing activities shall halt immediately until a qualified paleontologist can assess the significance of the discovery. Depending on determinations made by the paleontologist, work may either be allowed to continue once the discovery has been recorded, or if recommended by the paleontologist, recovery of the resource may be required, in which ground-disturbing activity within the area of the find would be temporarily halted until the resource has been recovered. If treatment and salvage is required, recommendations shall be consistent with Society of Vertebrate Paleontology guidelines and current professional standards. The District will ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.	Implementation: The District and/or its contractor(s) shall implement this measure in the event any paleontological resources are discovered. Timing: During all earth disturbing phases of Project construction.	Monitoring: If paleontological resources are uncovered, a report shall be prepared by the qualified paleontologist describing the find and its deposition. Initials: _____ Date: _____

EXHIBIT D – FLOW EQUALIZATION AND RESOURCE RECOVERY FACILITY LEVEE IMPROVEMENTS AND BAYFRONT RECYCLED WATER FACILITY PROJECT

CALIFORNIA STATE LANDS COMMISSION STATEMENT OF FINDINGS

1.0 INTRODUCTION

The California State Lands Commission (Commission or CSLC), acting as a responsible agency under the California Environmental Quality Act (CEQA), makes these findings to comply with CEQA as part of its discretionary approval to authorize issuance of a General Lease – Public Agency Use, to the West Bay Sanitary District (District), for use of sovereign land associated with the proposed Flow Equalization and Resource Recovery Facility (FERRF) Levee Improvements and Bayfront Recycled Water Facility Project. (Bayfront RWF or Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines¹, § 15381.) The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions. (Pub. Resources Code, §§ 6301, 6306, 6009, subd. (c).) All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust.

The Commission is a responsible agency under CEQA for the Project because the Commission must approve a lease for the Project to go forward and because the District, as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The District analyzed the environmental impacts associated with the Project in a Final Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2020050414) and, on May 12, 2021, certified the EIR and adopted a Mitigation Monitoring and Reporting Program (MMRP).

The Project would protect the District's 20-acre Menlo Park FERRF site (FERRF site), which is located at the end of Marsh Road in Menlo Park, adjacent to Bedwell Bayfront Park, on the edge of Flood Slough in the San Francisco Bay, from flooding and sea level rise by installing sheet pile walls around the northern and

¹ CEQA is codified in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.

western perimeters of the FERRF site, raising the grades of the perimeter access road within the property, and construction of an ecotone levee² to promote shoreline resiliency.

The District determined that the Project could have significant environmental effects on the following environmental resources:

- Aesthetics
- Biological Resources
- Cultural, Historical, and Tribal Cultural Resources
- Geology and Soils

Of the four resources areas noted above, Project components within the Commission's jurisdiction (i.e., construction of an ecotone levee) could have significant environmental effects on three of the resource areas, as shown below:

- Biological Resources
- Cultural, Historical, and Tribal Cultural Resources
- Geology and Soils

In certifying the EIR and approving the Project, the District imposed various mitigation measures for Project-related significant effects on the environment as conditions of Project approval and concluded that Project-related impacts would be substantially lessened with implementation of these mitigation measures such that the impacts would be less than significant.

As a responsible agency, the Commission complies with CEQA by considering the EIR and reaching its own conclusions on whether, how, and with what conditions to approve a project. In doing so, the Commission may require changes in a project to lessen or avoid the effects, either direct or indirect, of that part of the project which the Commission will be called on to carry out or approve. In order to ensure the identified mitigation measures and/or Project revisions are implemented, the Commission adopts the Mitigation Monitoring Program (MMP) as set forth in Exhibit C as part of its Project approval.

2.0 ADMINISTRATIVE RECORD OF PROCEEDINGS AND CUSTODIAN OF THE RECORD

These Findings are supported by substantial evidence contained in the EIR and other relevant information provided to the Commission or existing in its files, all of

² Ecotone levees are a nature-based adaptation measure comprising gentle slopes or ramps that provide a gradual transition zone between tidal marshes and flood risk management levees.

which is contained in the administrative record. The administrative record is located at the California State Lands Commission, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825. The custodian for the administrative record is the California State Lands Commission Division of Environmental Planning and Management.

3.0 FINDINGS

The Commission's role as a responsible agency affects the scope of, but not the obligation to adopt, findings required by CEQA. Findings are required under CEQA by each "public agency" that approves a project for which an EIR has been certified that identifies one or more significant impacts on the environment (Pub. Resources Code, § 21081, subd. (a); State CEQA Guidelines, § 15091, subd. (a).) Because the EIR certified by the District for the Project identifies potentially significant impacts that fall within the scope of the Commission's approval, the Commission makes the Findings set forth below as a responsible agency under CEQA. (State CEQA Guidelines, § 15096, subd. (h); *Riverwatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1202, 1207.

While the Commission must consider the environmental impacts of the Project as set forth in the EIR, the Commission's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the Commission's exercise of discretion involves only issuing a General Lease-Public Agency Use for this Project, the Commission is responsible for considering only the environmental impacts related to lands or resources subject to the Commission's jurisdiction. With respect to all other impacts associated with implementation of the Project, the Commission is bound by the legal presumption that the EIR fully complies with CEQA.

The Commission has reviewed and considered the information contained in the Project EIR. All significant adverse impacts of the Project identified in the EIR relating to the Commission's approval of a General Lease-Public Agency Use, which would allow construction of the ecotone levee, are included herein and organized according to the resource affected.

These Findings, which reflect the independent judgment of the Commission, are intended to comply with CEQA's mandate that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects unless the agency makes written findings for each of those significant effects. Possible findings on each significant effect are:

- (1) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the Commission. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or Project alternatives identified in the EIR.³

A discussion of supporting facts follows each Finding.

- Whenever Finding (1) occurs, the mitigation measures that lessen the significant environmental impact are identified in the facts supporting the Finding.
- Whenever Finding (2) occurs, the agencies with jurisdiction are specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed.

The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the EIR.

A. SUMMARY OF FINDINGS

Based on public scoping, the proposed Project will have No Impact on the following environmental issue areas:

- Agricultural and Forestry Resources
- Mineral Resources

The EIR subsequently identified the following impacts as Less Than Significant:

- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing

³ See Public Resources Code section 21081, subdivision (a) and State CEQA Guidelines section 15091, subdivision (a).

- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

For the remaining potentially significant effects, the Findings are organized by significant impacts within the EIR issue areas as presented below.

B. POTENTIALLY SIGNIFICANT IMPACTS

The impacts within CSLC jurisdiction identified in Table D-1 were determined in the EIR to be potentially significant absent mitigation. After application of mitigation, however, several impacts were determined to be less than significant with mitigation (LTSM). For the full text of each mitigation measure (MM), please refer to Exhibit C, Attachment C-1.

Table D-1 – Significant Impacts by Issue Area

Environmental Issue Area	Impact Nos.
Biological Resources	BIO-1, BIO-2, BIO-3, BIO-4, BIO-6, BIO-7, BIO-8
Cultural, Historical, and Tribal Cultural Resources	CUL-1
Geology and Soils	GEO-1, GEO-2

C. IMPACTS REDUCED TO LESS THAN SIGNIFICANT LEVELS WITH MITIGATION

The impacts identified below were determined in the EIR to be potentially significant absent mitigation; however, with mitigation the impacts were determined to be less than significant.

1. BIOLOGICAL RESOURCES

CEQA FINDING NO. BIO-1

Impact: **Impact BIO-1. The proposed Project may result in significant impacts to special-status plants due to disturbance or destruction of individuals or suitable habitat.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Coastal marsh milkvetch, Congdon's tarplant, Point Reyes bird's-beak, and saline clover have the potential to occur within the northern coastal salt marsh. Project development may affect these special-status plants due to direct disturbance of individuals and disturbance or destruction of suitable habitat. Direct impacts could include grading or filling areas supporting these species, trampling or crushing of plants, and soil compaction. Indirect impacts could include increased mobilization of dust onto plants, which can affect their photosynthesis and respiration, or changes to hydrology supporting these plants within adjacent wetlands due to grading or construction in nearby habitats.

Implementation of MMs BIO-1a and BIO-1b would avoid and reduce impacts on special-status plants by conducting focused surveys prior to Project implementation and installing buffers around plant populations to avoid impacts. Implementation of MMs BIO-1a and BIO-1b have been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-1a: Pre-Activity Surveys for Special-Status Plants.

MM BIO-1b: Avoidance Buffers

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-2

Impact: **Impact BIO-2. The proposed Project could harm special-status fish, degrade surface or ground water quality, and will result in both permanent and temporary impacts to aquatic habitat during construction of the ecotone levee.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Green sturgeon, longfin smelt, and steelhead may be present in tidally influenced habitat within and adjacent to the Project area, particularly Flood Slough. Because Project activities are proposed to take place below the high tide line during construction of the ecotone levee, the Project may indirectly impact special-status fish and Essential Fish Habitat (EFH) through the degradation of surface or ground water quality due to erosion and transport of fine sediments, unintentional release of contaminants, and soil compaction from access and equipment in tidal areas.

MMs BIO-2a, BIO-2b, and BIO-2c will protect water quality and reduce impacts to these special-status fish species and EFH by providing monitoring of species, adhering to measures for sheet pile installation and dewatering, including relocation of fish species. In addition, best management practices will be utilized to protect water quality and minimize noise impacts. Implementation of MMs BIO-2a, BIO-2b, and BIO-2c have been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-2a: Biological Monitoring During Construction in the Marsh

MM BIO-2b: Installation of Sheet Piles, Dewatering Plan, and Relocation of Stranded Fish

MM BIO-2c: Measures to Protect Water Quality

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-3

Impact: **Impact BIO-3. The proposed Project could harm salt marsh harvest mouse and salt marsh wandering shrew, and will result in both permanent and temporary impacts to tidal and upland habitats during construction of the ecotone levee. Additionally, if the proposed Project includes the installation of lighting that illuminates marsh habitat and the adjacent levees, such lighting could potentially have adverse effects on special-status species in the wetlands and adjacent levee refugia habitat.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Small numbers of salt marsh harvest mice and salt marsh wandering shrews may occur in pickleweed-dominated habitats in the norther portion of the study area, and on the levee slopes, particularly during high tide events. In the absence of protective measures, direct impacts on the salt marsh harvest mouse and salt marsh wandering shrew could potentially occur as a result of installing sheet pile walls around the perimeter of the levees and construction of an ecotone levee in the northern portion of the Project area.

MMs BIO-3a through BIO-3k would protect salt marsh harvest mice and salt marsh wandering shrews by educating workers about the species and their habitat, making sure that no pets are brought onsite and trash is removed, minimizing work at night and setting restrictions on artificial lighting, limiting vegetation removal, and using exclusion fencing (but not plastic monofilament netting). In addition, a monitoring and restoration plan must be approved by appropriate regulatory agencies. Implementation of MMs BIO-3a through BIO-3k have been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-3a: Worker Environmental Awareness Training

MM BIO-3b: No Pets

MM BIO-3c: Food Trash Removal

MM BIO-3d: Minimize Non-daylight Work; Prepare Lighting Plan

MM BIO-3e: Work During Extreme High Tides

MM BIO-3f: Limit Vegetation Removal

MM BIO-3g: Vegetation Removal Methods

MM BIO-3h: Exclusion Fence

MM BIO-3i: Artificial Lighting

MM BIO-3j: Prohibition of Plastic Monofilament Netting

MM BIO-3k: Monitoring and Adaptive Management Plan

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-4

Impact: **Impact BIO-4. The proposed Project could harm California black rail and California Ridgway's rail, and will result in both permanent and temporary impacts to tidal and upland habitats during construction.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

There is the potential for the Project to result in direct and indirect impacts to California Ridgway's rail and California black rail. If individuals or nests of these species are present during construction activities in salt marsh habitat, individuals or nests may be crushed or injured by personnel or equipment. The Project will also result in the direct removal of tidal marsh nesting and foraging habitat for these species. Construction activities may also result in the indirect disturbance of nesting and foraging California Ridgway's rails and California black rails due to the noise and activity of workers and equipment during Project activities.

MM BIO-4 will assure that construction activities in and adjacent to the marsh habitat for the species shall occur outside of their breeding season (January 25 to August 31) or preconstruction surveys will be conducted. Implementation of MM BIO-4 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-4: Pre-Construction/Pre-Disturbance Survey for California Black Rail and California Ridgway's Rail.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-6

Impact: **Impact BIO-6. The proposed Project could result in temporary and permanent impacts to Alameda song sparrow, American peregrine falcon, black skimmer, Bryant's savannah sparrow, California brown pelican, loggerhead shrike, northern harrier, San Francisco common yellowthroat, short-eared owl, western snowy plover, white-tailed kite, and other nesting birds protected by the MBTA and California Fish and Game Code.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Project construction noise and/or movement of construction equipment and personnel could temporarily disturb foraging birds, and construction, including the removal of trees and demolition of structures, during the avian breeding season (February 1 through September 15, for most species) could result in the abandonment of active nests with eggs or nestlings.

MMs BIO-6a, BIO-6b, and BIO-6d will ensure the protection of avian species through pre-construction surveys, buffer zones for detected nests, and filling bolt holes to reduce entanglement. Implementation of MMs BIO-6a, BIO-6b, and BIO-6d have been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-6a: Pre-Construction/Pre-Disturbance Surveys for Nesting Birds

MM BIO-6b: Nesting Bird Protection

MM BIO-6d: Cap Open-topped Posts/Fill Bolt Holes

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-7

Impact: **Impact BIO-7. The proposed Project could result in the introduction or spread of invasive plants, which can displace native marsh vegetation and reduce habitat quality of the salt marsh by reducing refugia and foraging habitat for native species, including special-status species.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

In salt marsh habitat, invasive weeds, such as perennial pepperweed (*Lepidium latifolium*) or non-native cordgrass (*Spartina* sp.) could spread into marsh habitats when seeds are attached to vehicles, equipment, and clothing. The spread of pepperweed and other invasive plants can displace native marsh vegetation and reduce habitat quality of the salt marsh by reducing refugia and foraging habitat for native species. The Project area contains alkali Russian thistle (*Salsola soda*) and stinkwort (*Dittrichia graveolens*), both moderately invasive species (Cal-IPC 2020). Even though alkali Russian thistle is already present along the fringes of the salt marsh in the Project area and stinkwort is present along the levees, Project activities could cause both species to spread further into previously unoccupied areas within the salt marsh and the upland areas of the proposed native ecotone.

MMs BIO-7a and BIO-7b will assure that invasive plant management is integrated into the restoration plan and construction measures to minimize the introduction of invasive plants are used. Implementation of MMs BIO-7a and BIO-7b has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-7a: Integrate Invasive Plant Management into the Ecotone Levee Restoration Plan

MM BIO-7b: Construction Measures to Minimize Invasive Plant Infestations

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-8

Impact: **Impact BIO-8. The proposed Project will result in both temporary and permanent impacts to jurisdictional waters and sensitive communities from the construction of the ecotone levee, installation of sheet piles along a section of existing levee, the discharge of stormwater runoff into an existing swale that discharges to the bay, and the disposal of the remainder effluent from the RO process into the bay.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

The proposed ecotone levee will provide higher quality native upland refugia habitat for special status species and migratory birds; and increase the resilience of tidal habitat in the Project area to climate change by allowing for sea level rise. Even though there will be an immediate loss of salt marsh habitat, the ecotone levee will allow upland areas to become inundated as water levels rise and transform back into marsh habitat, while still maintaining vital upland habitat. The ecotone levee will also protect the existing flow equalization facility and the proposed water recycling facility from future flooding caused by sea level rise, which are essential for protecting water quality in the San Francisco Bay.

MM BIO-8 will institute a Water Quality Monitoring Plan that will include an impact assessment, water quality standards and protections of those standards, monitoring methodology, and reporting requirements. Implementation of MM BIO-8 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-8: Water Quality Monitoring Plan

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

2. CULTURAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

CEQA FINDING NO. CUL-1

Impact: **Impact CUL-1. Project construction could cause potential disturbance of previously unknown prehistoric, archaeological, or tribal cultural resources, or human remains, during Project construction.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

An Historic Resource Evaluation Report analyzed the Project's potential impacts on historic resources and determined that there are no historic resources on the Project site or in the immediate vicinity of any of the off-site Project features. However, a significant impact would occur if ground-disturbing activities (e.g., grading, excavation, grubbing, trenching etc.) associated with Project construction disturb, damage, or destroy previously unknown buried prehistoric features and deposits or Tribal cultural resources that could be considered significant.

MMs CUL-1a through CUL-1d will assure the retention of qualified archeologists and Tribal monitors during construction should resources be unearthed. In addition, all Project plans will state that ground disturbing activities have the potential for the discovery of human remains. Implementation of MMs CUL-1a through CUL-1d have been incorporated into the Project to reduce this impact to a less than significant level.

MM CUL-1a: Inadvertent Discovery.

MM CUL-1b: Tribal Resources.

MM CUL-1c: Human Remains.

MM CUL-1d: Plan Details.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

3. GEOLOGY AND SOILS

CEQA FINDING NO. GEO-1

Impact: **Impact GEO-1. The Project has the potential to create or exacerbate existing conditions related to seismic ground shaking, seismic-related ground failure, slope stability, and expansive soils.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

The Project would include raising the levee grades by a few feet and adding fill to the northeast side of the site to create an ecotone levee. This could make the perimeter levees more prone to slope instability during an earthquake.

To address slope instability during a major seismic event and to improve safety factors, sheetpiling is proposed on the western and northeastern sides of the site. MM GEO-1 will require the District to prepare a site-specific geotechnical investigation and incorporate all recommendations into Project plans and specifications. Implementation of MM GEO-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM GEO-1: Geotechnical Engineering Investigation.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. GEO-2

Impact: **Impact GEO-2. Project construction could unearth paleontological resources, including fossils.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Old Bay Clay/alluvial fan deposits are Pleistocene age (10,000 to 2.6 million years ago) and have the potential to yield fossils and paleontological resources. Project activities could unearth soils that could yield paleontological resources.

MM GEO-2 will assure the protection of paleontological resources by halting construction until a qualified paleontologist can assess the significance of a discovery and conducting treatment and salvage if required. Implementation of MM GEO-2 has been incorporated into the Project to reduce this impact to a less than significant level.

MM GEO-2: Paleontological Resources.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

D. FINDINGS ON ALTERNATIVES

As explained in *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000:

When it comes time to decide on project approval, the public agency's decisionmaking body evaluates whether the alternatives [analyzed in the EIR] are actually feasible.... At this final stage of project approval, the agency considers whether '[s]pecific economic, legal, social, technological, or other considerations...make infeasible the mitigation measures or alternatives identified in the environmental impact report.' Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives [citations omitted].

The three alternatives analyzed in the EIR (Section 11.4) represent a reasonable range of potentially feasible alternatives that could reduce one or more significant impacts of the Project. These alternatives include:

1. No Project
2. Flood Protection Through Placement of Sheet Pile Only & Bayfront RWF Alternative
3. Reduced Size of Ponds to Accommodate Ecotone Levee

As presented in the EIR, the alternatives were described and compared with each other and with the proposed Project.

Under State CEQA Guidelines section 15126.6, subdivision (e)(2), if the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. The Proposed Project Alternative is considered the environmentally superior alternative.

The District independently reviewed and considered the information on alternatives provided in the EIR and in the record. The EIR reflects the District's independent judgment as to alternatives. The District found that the Project provides the best balance between the Project goals and objectives and the Project's benefits. The three alternatives proposed and evaluated in the EIR were rejected as being infeasible for the following reasons:

- **No Project:** The Project site would remain susceptible to a 100-year flood, which could potentially release pollutants into the San Francisco Bay. The flooding and pollutant discharge potential would increase over time given anticipated sea level rise. Over the long term, wetland and upland habitat along the northern levee would be permanently lost to sea level rise. The flooding, discharge, and wetland losses are all impacts of climate change on the Project site that would not be addressed under the No Project Alternative. The No Project Alternative would not meet any of the basic objectives of the Project.
- **Flood Protection Through Placement of Sheet Pile Only & Bayfront RWF Alternative:** This alternative would meet most of the Project objectives including providing Federal Emergency Management Agency (FEMA) certified flood improvements to the site, maintaining the site's existing function and maximum water storage, providing a recycled water facility (RWF), improving the existing drainage ditch, and decommissioning the existing outfall/drainage system and rerouting on-site drainage; however, this alternative does not meet the stated objective to incorporate an ecotone levee to promote shoreline resiliency. Construction of an ecotone levee, as included in the proposed Project, would avoid the permanent loss of wetlands from projected sea level rise.
- **Reduced Size of Ponds to Accommodate Ecotone Levee:** This alternative would meet most of the Project objectives including providing FEMA certified flood improvements to the site, incorporating an ecotone levee to promote shoreline resiliency, providing a Bayfront RWF, improving the existing drainage ditch, and rerouting on-site drainage; however, this alternative does not meet the stated objective to maintain the site's existing function and preserve maximum flow equalization storage.

Based upon the objectives identified in the EIR and the detailed mitigation measures imposed upon the Project, the Commission has determined that the Project should be approved, subject to such mitigation measures (Exhibit C, Mitigation Monitoring Program).