Final

DEER ISLAND BASIN COMPLEX TIDAL WETLAND RESTORATION PROJECT

Initial Study State Clearinghouse #2023030749

Prepared for Marin County Flood Control and Water Conservation District May 2023





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PLANNING DIVISION

MITIGATED NEGATIVE DECLARATION

Marin County Environmental Review

Pursuant to Section 21000 et. seq. of the Public Resources Code and Marin County Environmental Impact Review Guidelines and Procedures, a Mitigated Negative Declaration is hereby granted for the following project.

- 1. Project Name: Deer Island Basin Complex Tidal Wetland Restoration Project
- Location: Novato Creek, both sides, between SMART Railroad and State Highway 37. Assessor's Parcel Numbers 153-170-46, 153-170-44, 153-200-57, 153-200-38, 153-200-37,153-200-34, 153-200-31, 153-200-28, 153-200-27, 153-200-26, 153-200-25
- 3. Project Summary: The proposed project would restore ecologically valuable tidal wetlands for endangered species and improve tidal connectivity to the diked areas that were historically tidal wetlands along Novato Creek.
- 4. Project Sponsor: Marin County Flood Control and Water Conservation District
- 5. Finding:
 Based on the attached Initial Study and without a public hearing, it is my judgment that:
 ☐ The project will not have a significant effect on the environment.
 ☑ The significant effects of the project noted in the Initial Study attached have been mitigated by modifications to the project so that the potential adverse effects are reduced to a point where no significant effects would occur.
 ☐ Date: 3/27/2023
 ☐ Rachel Reid
 ☐ Environmental Planning Manager

_____ Date: ______
President

Based on the attached Initial Study, a Mitigated Negative Declaration is granted.

Marin County Board of Supervisors

1	Mitigation	Measures
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	No potential adverse impacts were identified; and therefore, no mitigation measures are required.
	Please refer to mitigation measures in the attached Initial Study.
\boxtimes	The potential adverse impacts have been found to be mitigable as noted in the Initial Study attached.

All of the mitigation measures for the impacts listed above have been incorporated into the project and are required as conditions of approval.

2. Preparation:

This Mitigated Negative Declaration was prepared by Roger Leventhal of the Marin County Flood Control and Water Conservation District. Copies may be reviewed at the address listed below.

Marin County Flood Control and Water Conservation District 3501 Civic Center Drive, Room 304 San Rafael, CA 94903 (415) 473-6680 Monday-Friday, 8:00 a.m. to 5:00 p.m.

An electronic version is also available for review on the County of Marin Environmental Planning website.

CHAPTER 1

Comment Letters and Responses

1.1 Introduction

This section contains the comment letters that were received on the Initial Study with Intent to Adopt a Mitigated Negative Declaration (IS/MND) for the Deer Island Basin Complex Tidal Wetland Restoration Project (Project) (State Clearinghouse #2023030749). The Draft IS/MND was circulated by the Marin County Flood Control and Water Conservation District (District) for a 30-day review period from March 30 through May 1, 2023. During that period, two comment letters were received:

- California Department of Transportation (Caltrans), District 4, Office of Regional and Community Planning dated May 1, 2023
- California State Lands Commission, Division of Environmental Science, Planning, and Management – dated May 1, 2023

Following each comment letter is a response by the District intended to supplement, clarify, or amend information provided in the Draft IS/MND or refer the reader to the appropriate place in the document where the requested information can be found. Comments that are not directly related to environmental issues may be discussed or noted for the record. Where text changes are warranted based on comments on the IS/MND, those changes are generally included in or following the response to comment.

Pursuant to State CEQA Guidelines Section 15070, an IS/MND continues to be the appropriate CEQA document for the project, as no fair argument, based on substantial evidence in the record, was presented that the project may have a significant impact on the environment. Further, the IS/MND does not require re-circulation, per State CEQA Guidelines Section 15073.5, and this document only includes minor clarifications.

1. Comment Letters and Responses

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GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660
www.dot.ca.gov





May 1, 2023

SCH #: 2023030749

GTS #: 04-MRN-2023-00285

GTS ID: 29348

Co/Rt/Pm: Marin / 37 / 12.275

Roger Leventhal, Senior Civic Engineer Marin County Flood Control District 3501 Civic Center Drive, Room 304 San Rafael, CA 94903

Re: Deer Island Basin Complex Tidal Wetland Restoration Project – Initial Study/Mitigated Negative Declaration (IS/MND)

Dear Roger Leventhal:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Deer Island Basin Complex Tidal Wetland Restoration Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the March 2023 IS/MND.

Project Understanding

The proposed project consists of a tidal wetland restoration that would improve tidal connectivity to the diked areas along Novato Creek. This project would be beneficial to endangered species. This project site is located directly adjacent to State Route (SR)-37.

Construction-Related Impacts

Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits.

CT-1

Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

Roger Leventhal, Senior Civic Engineer May 1, 2023 Page 2

Lead Agency

As the Lead Agency, the County of Marin is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

CT-2

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

CT-3

Encroachment Permit

Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' Right-of-Way (ROW) requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

CT-4

Please note that Caltrans is in the process of implementing an online, automated, and milestone-based Caltrans Encroachment Permit System (CEPS) to replace the current permit application submittal process with a fully electronic system, including online payments. The new system is expected to be available during 2023. To obtain information about the most current encroachment permit process and to download the permit application, please visit https://dot.ca.gov/programs/traffic-operations/ep/applications.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email <u>LDR-D4@dot.ca.gov</u>.

Roger Leventhal, Senior Civic Engineer May 1, 2023 Page 3

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Sincerely,

YUNSHENG LUO

Acting District Branch Chief Local Development Review

c: State Clearinghouse

1. Comment Letters and Responses

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Letter CT Response

California Department of Transportation (Caltrans), District 4, Office of Regional and Community Planning

May 1, 2023

- CT-1 As noted in the Draft IS/MND Project Description, excavated materials generated within the project site would be used on the project site. There would be no import or off-haul of excavated material attributable to the Project. Oversized load vehicles may be needed to bring equipment to and from the project site, but those trips would be as needed. The District acknowledges that an encroachment permit would be needed for work occurring with the State Transportation Network (STN) and Caltrans right-of-way and would be subject to the conditions included in the permit, a transportation management plan (if such a plan is found to be necessary), etc.
- CT-2 The Project includes no improvements or mitigative actions that would temporarily or permanently be within the traveled way within the STN. No mitigation measures are needed.
- CT-3 No physical Caltrans facilities, or public and permitted bicycle or pedestrian accesses and facilities, would be affected by construction of the Project and the resulting restored landscape and habitat.
- CT-4 The District acknowledges that an encroachment permit would be needed for work occurring with the STN and Caltrans right-of-way and work would be subject to the conditions included in the permit. An application will be filed when the Project's design [within Caltrans right-of-way] is finalized and supporting documentation is available.

1. Comment Letters and Responses

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GAVIN NEWSOM, Governor

STATE OF CALIFORNIA

CALIFORNIA STATE LANDS COMMISSION

100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202



JENNIFER LUCCHESI, Executive Officer

916.574.1800

TTY CA Relay Service: **711** or Phone **800.735.2922** from Voice Phone **800.735.2929** or for Spanish **800.855.3000**

Contact Phone: 916.574.1900

May 1, 2023

File Ref: SCH # 2023030749

Marin County Flood Control and Water Conservation District Roger Leventhal 3501 Civic Center Drive, Room 304 San Rafael, CA 94903 VIA ELECTRONIC MAIL ONLY (envplanning@marincounty.org)

Subject: Initial Study and Mitigated Negative Declaration for the Deer Island Basin Complex Tidal Wetland Restoration Project, Marin County

Dear Roger Leventhal:

The California State Lands Commission (Commission) staff has reviewed the Initial Study and Mitigated Negative Declaration (IS/MND) for the Deer Island Basin Complex Tidal Wetland Restoration Project (Project), which is being prepared by the Marin County Flood Control and Water Conservation District (District). The District, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission will act as a responsible agency.

Commission Jurisdiction

Staff is processing the District's application A3039 for amendment of Lease No. PRC 7008 for wetland restoration. The application identifies restoration work within two ponds (Duck Bill Pond and Heron's Beak Pond) that are adjacent to Novato Creek. Staff has reviewed the Draft IS/MND, and it appears that the Project would include excavation and other activities adjacent to and within the bed of Novato Creek. The bed of Novato Creek is State-owned sovereign land. Any proposed work taking place on sovereign land within Novato Creek will require amendment of application A3039 to include the additional work.

CSLC-1

Project Description

The District proposes to restore and enhance 245 acres of aquatic habitat, 6.4 acres of transitional habitat, and 20.8 acres of uplands to restore ecologically valuable tidal wetlands for endangered species and improve tidal connectivity to the diked areas that were historically tidal wetlands along Novato Creek. From the Project Description, Commission staff understands that the Project would include the following components that have potential to affect State sovereign land:

- Novato Creek Channel Widening. The Novato Creek channel would be enhanced by both widening the creek channel in areas where the existing channel is immediately adjacent to the Duck Bill and Heron's Beak Levees and creating new side channels to the main channel in areas where the existing channel is further from the Levees. Excavation would also occur within a 50-foot corridor along the creek side of the existing Levees.
- <u>Duck Bill and Heron's Beak Ponds</u> (Bird Ponds) Restoration. Tidal wetland and open water habitat would be restored within the Bird Ponds by lowering the existing Levees to tidal wetland elevations, creating new tidal wetlands along the Bird Ponds side of the Lynwood Levee using material excavated from the existing Bird Ponds levees and Novato Creek floodplain, and breaching the existing Bird Pond levees to re-introduce tidal hydraulic connectivity.

Environmental Review

Commission staff requests that the District consider the following comments on the Project's IS/MND, to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the IS/MND when considering application A3039 for the Project.

General Comments

1. <u>Deferred Mitigation:</u> When it is impractical or infeasible to develop the specific details of a mitigation measure during the CEQA review process, the document should explain the reasons why it is impractical or infeasible, and the lead agency should commit to implement the mitigation, adopt a specified performance standard to be achieved by the mitigation, and identify the types of actions that may achieve compliance with the performance standard (State CEQA Guidelines, §15126.4, subd. (a)(1)(B)). MM BIO-1 requires the District to prepare and approve a mitigation and monitoring plan for any discovered special-status plant species and MM BIO-11 requires a monitoring and adaptive management plan for habitat restoration, but neither identifies a performance standard or provides metrics or action types that will be included in the plan to measure the measure's

CSLC-2

efficacy in reducing the particular impact to a less than significant level. Instead, both measures note that the future plans will specify "success criteria" (MM BIO-1) or "performance criteria" (MM BIO-11). Recent case law continues to spotlight the importance of performance standards in properly formulated mitigation (Save the Agoura Cornell Knoll et al. v. City of Agoura Hills et al. (2020) 46 Cal.App.5th 665). Commission staff requests that more specific information be provided to 1) explain why it is infeasible for the District to develop specific mitigation measure details in MMs BIO-1 and BIO-11 and 2) set forth performance criteria and types of actions that will mitigate the potentially significant impacts to less than significant.

CSLC-2 (cont.)

2. Project Description – Site Preparation: As part of site preparation, the Novato Creek marshplain and Deer Island Basin tidal excavation areas would be cleared and grubbed. The material would then be used at the Project site to either build ecotone subgrade or be disposed of at an offsite location. However, the Project Description only mentions this alternative when discussing site preparation activities, and the IS/MND does not later explain under which circumstances the material would be transported offsite. Commission staff recommends that the document provide additional information specifying when and how offsite disposal would occur. In addition, please confirm that the potential truck trips associated with offsite disposal are already included in the Appendix A calculations and incorporated into the Environmental Impact Checklist analysis.

CSLC-3

3. <u>Mitigation Monitoring Program (MMP)</u>: The adopted IS/MND will also require adoption of an MMP, pursuant to CEQA Guidelines section 15074, subdivision (d). Each mitigation measure (MM) should be included with the associated timing for the measure, the agency responsible (if different from the District), and metrics to track and determine whether the measure has been fulfilled. Without this information, CEQA responsible agencies may need to take additional actions to ensure implementation of those activities under their respective jurisdiction.

CSLC-4

4. <u>Project Description – Revegetation</u>: The Project would revegetate the Bird Pond areas after grading activities and would include planting and seeding to provide a variety of locally native wetland, ecotone transition, and upland habitats. Staff recommends that the District consider soliciting and incorporating the consulting tribes' input regarding the proposed native plant species.

CSLC-5

Biological Resources

5. <u>California Ridgway's Rail and California Black Rail</u>: The IS/MND would implement MMs BIO-2 and BIO-4 to mitigate potential impacts to California Ridgway's rail and California black rail. However, neither measure addresses

CSLC-6

impacts to any active nests discovered during MM BIO-4's protocol-level surveys. Please augment MM BIO-4 to include what actions would be taken if an active nest is found. Alternatively, Commission staff notes that MM BIO-5 addresses nesting bird protection and could be included as a measure for California Ridgway's rail and California black rail.

CSLC-6 (cont.)

6. <u>Tree Replacement</u>: The District would need to replace up to seven trees that may need to be removed during primary tidal channel excavation. MM BIO-10 notes that the replacement trees would be located at an "ecologically appropriate site identified by the District." Please clarify whether the replacement tree location would be evaluated first for any feasible on-site mitigation and how off-site mitigation locations would be prioritized (i.e., proximity to the Project site, habitat connectivity).

CSLC-7

7. Monitoring and Adaptive Management Plan: To address impacts to federal-protected wetlands and waters, MM BIO-11 would establish a monitoring and adaptive management plan to ensure the success of post-Project habitat conversions. While Section VI., 4., c) requires MM BIO-11 to address the success of these habitat conversions, Section VI., 4., b) describes similar post-Project habitat conversions, including increased habitat acreage, but determines that impacts to salt marsh bulrush marsh are less than significant and does not require a mitigation measure to ensure that habitat conversion success. Commission staff recommends that the IS/MND provide additional information to support the significance determination for salt marsh bulrush marsh impacts. In the alternative, Commission staff would recommend including MM BIO-11 for Section VI., 4., b) and c).

CSLC-8

Cultural Resources

8. <u>Title to Resources Within Commission Jurisdiction</u>: The IS/MND should state that the title to all archaeological sites and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the Commission (Pub. Resources Code, § 6313). Commission staff requests that the District consult with Staff Attorney Jamie Garrett should any cultural resources on state lands be discovered during construction of the proposed Project.

CSLC-9

Staff requests that the following statement be included in the IS/MND's Mitigation Monitoring Program: "The final disposition of archaeological, historical, and paleontological resources recovered on State land under the jurisdiction of the California State Lands Commission must be approved by the Commission."

Tribal Cultural Resources

9. <u>Unanticipated Discovery</u>: MM CUL-2 describes how a qualified archaeologist would prepare the Project's Cultural Resources Monitoring Plan (CRMP) that describes the locations, methods, and reporting for cultural resources construction monitoring. The CRMP would also include the inadvertent discovery protocol. While the IS/MND acknowledges that neither the Federated Indians of Graton Rancheria nor the Coast Miwok Tribal Council of Marin have identified a known and potentially impacted tribal cultural resource, the document does not clarify whether the tribes have provided any input related to unanticipated discovery and CRMP development. In the absence of this information, Commission staff strongly encourages the District to revise MM CUL-2 to state that the CRMP will be developed and implemented in coordination with culturally affiliated tribes who have requested participation.

CSLC-10

10. <u>Tribal Monitoring</u>: MM CUL-2 notes that "If the District deems it necessary, they may invite a California Native American Tribe to participate in the construction monitoring." (page VI-44). Please clarify how the District would deem tribal monitoring "necessary." In addition, MM TRI-1 requires the District to retain an archaeologist to assess any unanticipated discovery. It appears that this archaeologist would first determine whether the resource was of Native American origin, then contact the District, and finally the District would contact any potentially affected Tribes. Commission staff recommends that the IS/MND clarify whether consulted tribes have requested tribal monitoring during construction activities. If unknown, staff requests that MM CUL-2 and MM TRI-1 be modified to require an archeological monitor and a Tribal monitor (if requested by a culturally affiliated Tribe) onsite.

CSLC-11

Thank you for the opportunity to comment on the IS/MND for the Project. As a responsible and trustee agency, the Commission will rely on the adopted IS/MND when issuing an amended lease as specified above (see Section "Commission Jurisdiction and Public Trust Lands"). We request that you consider our comments before adopting the IS/MND.

Please send electronic copies of the adopted IS/MND, Mitigation Monitoring Program, Notice of Determination, and approving resolution when they become available. Please note that federal and state laws require all government entities to improve accessibility of information technology and content by complying with established accessibility requirements. (29 U.S.C. § 794d; 36 C.F.R. § 1194.1 et seq.; Gov. Code, § 7405.) California State law prohibits State agencies from publishing on their websites content that does not comply with accessibility requirements. (Gov. Code, § 115467.) Therefore, any documents submitted to Commission staff during the processing of a lease or permit,

including all CEQA documentation, must meet accessibility requirements for Commission staff to place the application on the Commission agenda.

Refer questions concerning environmental review to Alexandra Borack, Senior Environmental Scientist, at Alexandra.Borack@slc.ca.gov or (916) 574-2399. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Jamie Garrett, Staff Attorney III, at Jamie.Garrett@slc.ca.gov or (916) 574-0398. For questions concerning Commission leasing jurisdiction, please contact Marlene Schroeder, Public Land Management Specialist IV, at Marlene.Schroeder@slc.ca.gov or (916) 574-2320.

Sincerely,

Nicole Dobroski, Chief Division of Environmental Science,

Planning, and Management

cc: Office of Planning and Research

A. Borack, Commission

J. Garrett, Commission

M. Schroeder, Commission

Letter CSLC California State Lands Commission (CSLC), Division of Environmental Science, Planning, and Management

Response May 1, 2023

- CSLC-1 The comment notes that areas of the Deer Island Basin Complex Tidal Wetland Restoration Project are within State-owned sovereign land and require the District to submit an application for the amendment of the existing CSLC lease. As noted in the comment, CSLC staff is processing the District's application A3039 to amend the current Lease No. PRC 7008 and the new lease will include State-owned sovereign land.
- CSLC-2 In the discussion of Operations and Maintenance in the Draft IS/MND Project Description, page II-38, it is stated: "Grant requirements and regulatory agency permits and approvals may require specific post-construction monitoring activities to be incorporated into the adaptive management aspects of the project's Monitoring and Adaptive Management Plan." Due to the potential permit and approval requirements that might affect what specific resource(s) is monitored and what the success criteria will be in the Monitoring and Adaptive Management Plan, specific performance requirements were not provided in the Draft IS/MND. Mitigation Measures BIO-1 and BIO-11 have been revised to provide additional specificity, although it should be noted that future permit and approval conditions may require adjustments to these and other mitigation measures.

Mitigation Measure BIO-1: Rare Plant Surveys Special Status Plant Protection

A qualified botanist shall conduct appropriately timed floristic surveys for the special-status plant species identified as having a medium to high potential to occur within the construction disturbance area. The surveys shall be conducted in all suitable habitat within the potential disturbance area. Surveys and reporting shall be conducted following the current California Department of Fish and Wildlife protocol. If special-status plant species are found, then the District shall prepare a mitigation and monitoring plan for plants that cannot be avoided. The plan shall specify success criteria that result in the preservation of at least as many special-status plants as are impacted by the Project. The plan shall be approved by the District prior to the initiation of any Project activities that will impact the special-status plant(s).

If special-status plant species are identified within the Project construction disturbance area, then the biologist shall establish an appropriate buffer area for each plant population to exclude activities that directly remove or alter the habitat of, or result in indirect adverse impacts on, the special-status plant species. A qualified biologist shall oversee installation of a temporary, mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any established buffer areas to prevent encroachment by construction vehicles and personnel. The qualified biologist shall determine the exact location of the fencing. The fencing shall be strung tightly on posts set at maximum intervals of 10 feet (3 meters) and shall be checked and maintained weekly until

all construction is complete. The buffer zone established by the fencing shall be marked by a sign stating:

"This is habitat of [list rare plant(s)], and must not be disturbed. This species is protected by [the ESA of 1973, as amended/CESA/California Native Plant Protection Act]."

If direct impacts cannot be avoided, the District shall prepare a plan for minimizing the impacts by one or more of the following methods: (1) salvage and replant plants at the same location following construction; (2) salvage and relocate the plants to a suitable off-site location with long-term assurance of site protection; (3) collect seeds or other propagules for reintroduction at the site or elsewhere; or (4) payment of fees in lieu of preservation of individual plants, to be used for conservation efforts elsewhere. The District shall review and approve the plan.

The success criterion for any seeded, planted, and/or relocated plants shall be full replacement at a 1:1 ratio after 5 years. Monitoring surveys of the seeded, planted, or transplanted individuals shall be conducted for a minimum of 5 years, to ensure that the success criterion can be achieved at year 5. If it appears the success criterion would not be met after 5 years, contingency measures may be applied. Such measures shall include, but not be limited to: additional seeding and planting, altering or implementing weed management activities, or introducing or altering other management activities.

Any special-status plant species observed during surveys shall be reported to the CDFW and submitted to the CNDDB and reported to USFWS, if federally listed.

Mitigation Measure BIO-11: Develop and Implement a Monitoring and Adaptive Management Plan

The District shall develop and submit a Monitoring and Adaptive Management Plan to be implemented during the monitoring period to assure desired outcomes. The plan shall be submitted to CDFW, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers prior to the start of construction. Elements of this plan shall be based upon final project design and construction documents. The plan shall include description of protocols for monitoring vegetation and geomorphology to evaluate project performance, monitoring schedule, performance criteria and thresholds that would trigger adaptive management actions, and reporting. Physical and biological monitoring would be conducted at the completion of the Project at years 1, 3, and 5 post-construction. Percent cover of vegetation will be monitored within the different habitat types at the project site including the tidal marsh. A report shall be prepared and provided to the above-listed regulatory agencies in each year that post-construction monitoring is conducted.

CLSC-3 As noted in the Draft IS/MND Project Description, excavated materials generated within the project site would be used on the project site. There would be no import or off-haul of excavated material attributable to the Project. This scenario is accounted for in the Appendix A air quality modeling calculations.

- CLSC-4 The District has prepared a Mitigation Monitoring and Reporting Program (MMRP) that is included in the Final IS/MND adopted by the Marin County Board of Supervisors. The MMRP has incorporated any revisions to mitigation measures considered through comments received and presented in this section. The IS/MND and MMRP will be available on the Board of Supervisor's website when agendized for Board consideration of approval.
- CLSC-5 As part of AB 52 consultation, Tribes were asked to provide input to planting plans or specific plants they wanted to see in the area. The District will continue to work with the Tribes who showed interest and incorporate their feedback, as feasible.
- CLSC-6 Mitigation Measure BIO-4 has been revised to include the requirement to implement a 500-foot buffer if either rail species is detected during protocol-level surveys.

Mitigation Measure BIO-4: California Ridgway's Rail and California Black Rail Protection

- To minimize or avoid the loss of individual California Ridgway's rail and California black rail, construction activities, including vegetation management activities requiring heavy equipment, adjacent to the tidal marsh areas (within 500 feet [150 meters]) or a distance determined in coordination with USFWS or CDFW, shall be avoided during the breeding season from February 1 through August 31.
- If areas within or adjacent to rail habitat cannot be avoided during the breeding season, protocol-level surveys shall be conducted to determine rail nesting locations. The surveys shall focus on potential habitat that could be disturbed by construction activities during the breeding season to ensure that rails are not breeding in these locations.
 - If protocol surveys determine that breeding California black rail and/or California Ridgway's rail are present in the project area, construction activities shall not occur within 500 feet of a detected Ridgway's rail or black rail call center during their breeding season (February 1- August 31) or measures shall be taken to limit the impact of noise and/or visual to not impact any nest (in consultation with CDFW and USFWS).
 - If no breeding California black rail or California Ridgway's rail are detected during surveys, or if their breeding territories can be avoided by 500 feet (150 meters), then Project activities may proceed at that location.
- CLSC-7 As the project site is being converted into tidally influenced marsh land (and no longer upland levees), replacement trees would be located as close to the project site in appropriate ecological areas as possible. Off-site mitigation locations would be prioritized by (1) proximity to the Project site while also in an ecologically appropriate location for riparian trees, (2) ecological lift the trees would provide to the surrounding habitat, and (3) accessibility for maintenance and temporary irrigation.

- CLSC-8 Please refer to the response to Comment CLSC-2 above.
- CLSC-9 Mitigation Measures CUL-2 and TRI-1 have been revised as follows to add a protocol to execute if any potential archaeological resources or shipwrecks are encountered on or in the tide and submerged lands of the State of California, as well as specific language regarding disposition of such finds requested. Added text is shown in <u>underline</u> and deleted text in <u>strike through</u>.

Mitigation Measure CUL-2: Cultural Resources Construction Monitoring

An archaeologist meeting the SOI PQS for Archeology, in coordination with California Native American Tribes traditionally and culturally affiliated with the Project site that have requested participation, shall prepare a Cultural Resources Monitoring Plan to describe the locations, methods (including inadvertent discovery protocol [i.e., City of Novato Municipal Code Sections 4-7.3(b), 4.7.5, and 4.7-6]), and reporting for cultural resources construction monitoring. The construction monitoring shall focus on Project-related ground-disturbing activities within existing levee prisms, and shall include, at a minimum, spotchecks of the major ground-disturbing Project-related activities. The monitoring shall be conducted by an archaeologist meeting, or under the supervision of an archaeologist meeting, the SOI PQS for Archeology. Daily monitoring logs shall be prepared detailing the monitoring activities and findings. If the District deems it necessary, they may The District shall invite a California Native American Tribe to participate in the construction monitoring. A Cultural Resources Monitoring Results Report (CRMRR) summarizing the results of the monitoring shall be prepared by an archaeologist meeting the SOI PQS for Archeology. The CRMRR shall be submitted to the NWIC upon District review and approval. If any archaeological resources are inadvertently discovered during Project-related construction activities not on or in the tide and submerged lands of California, the procedures outlined in the including for inadvertent discovery protocol for archaeological resources and human remains (see in the City of Novato Municipal Code Sections 4-7.3(b), 4.7.5, and 4.7-6, as well as those in and Mitigation Measure TRI-1, shall be followed. If a shipwreck, and associated artifacts, or other cultural resource on or in the tide and submerged lands of California is encountered during Project construction or operation, the following measures shall also be implemented:

- The District shall initiate consultation with California State Lands Commission (CSLC) staff within two business days of the discovery.
- Per PRC Section 6313(c), any submerged cultural resource remaining in State waters for more than 50 years shall be presumed to be archaeologically or historically significant.
- If the find is a maritime archaeological resource, the qualified archaeologist assessing the find shall have expertise in maritime archaeology.
- The District shall consult with the CSLC regarding assessment of the find and development of any treatment measures to minimize or mitigate potential impacts on the resource, pursuant to PRC Section 21083.2 and CCR Section 15126.4. Treatment measures would typically consist of (but would not

necessarily be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be affected by the proposed project. The District shall prepare a treatment plan to document the treatment measures and their implementation methods. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries, and interested professionals. Any treatment measures implemented shall be documented in a professional-level technical report (e.g., archaeological testing results report, archaeological data recovery report, ethnographic report) authored by a qualified archaeologist, to be filed with the CHRIS. Project construction work at the location of the find may commence upon completion of the approved treatment and authorization by the District. Work may proceed in other parts of the Project site while the mitigation is being carried out.

- The District shall submit to the CSLC any report prepared for the resource as part of the assessment of the find and implementation of treatment measures to minimize or mitigate potential impacts.
- The final disposition of archaeological, historical, and paleontological resources recovered on State land under the jurisdiction of the CSLC must be approved by the Commission.

Mitigation Measure TRI-1: Inadvertent Discovery Protocol for Native American Resources

If Native American archaeological resources are encountered during Project construction, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the SOI PQS for Archeology, and any California Native American Tribes participating in construction monitoring, shall inspect the find within 24 hours of discovery and notify the District of their initial assessment. Native American archaeological materials might include: obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones); and battered stone tools, such as hammerstones and pitted stones.

If any Native American cultural resources are encountered on or in the tide and submerged lands of California during Project construction or operation, the measures related to unanticipated discoveries of cultural resources on or in the tide and submerged lands of California provided in Mitigation Measure CUL-2 shall also then be implemented.

For Native American cultural resources encountered in areas not on or in the tide and submerged lands of California during Project, If if the District determines, based on recommendations from the qualified archaeologist and California Native American Tribes that are traditionally and culturally affiliated with the Project site, that the resource may qualify as a tribal cultural resource (as defined in PRC Section 21074), the resource shall be avoided, if feasible. Consistent with

CEOA Guidelines Section 15126.4(b)(3), this may be accomplished through: planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance of the resource is not feasible, the District shall continue to consult with California Native American Tribes that are traditionally and culturally affiliated with the Project site to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). Any technical report developed to document the implementation mitigation shall be submitted to the NWIC upon District approval, unless the document contains information that California Native American Tribes involved in the development of the mitigation deem should not be filed with the NWIC, in which case, the report shall be submitted to the NAHC.

- CLSC-10 Mitigation Measure CUL-2 has been revised to include language regarding involvement of Californian Native American Tribes in developing the Project's Cultural Resources Monitoring Plan. Refer to response CLSC-9 for the revised text.
- CLSC-11 Mitigation Measure CUL-2 has been revised to include language requiring the District to invite California Native American Tribes to participate in the Project's construction monitoring. Also, the language of Mitigation Measure TRI-11 has been revised to require that any California Native American Tribes participating in construction monitoring also inspect the find.

CHAPTER 2

Mitigation Monitoring and Reporting Program

The following Mitigation Monitoring and Reporting Program (MMRP) identifies the Mitigation Measures that will be implemented as part of the Deer Island Basin Complex Tidal Wetland Restoration Project (Project). The Marin County Flood Control and Water Conservation District (District) or its Contractors under the supervision of the District will be responsible for implementing the following measures. The District will be responsible for monitoring to ensure the following measures are effectively implemented to reduce impacts to less-than-significant levels.

TABLE 2-1
MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Air Quality (cont.)					
Criterion b): Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard	See Mitigation Measure AQ-1: Implement BAAQMD Basic Construction Mitigation Measures, above.	During construction	District and Construction Contractor	District and BAAQMD	
Biological Resources					
Criterion a): Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service	Mitigation Measure BIO-1: Special Status Plant Protection A qualified botanist shall conduct appropriately timed floristic surveys for the special-status plant species identified as having a medium to high potential to occur within the construction disturbance area. The surveys shall be conducted in all suitable habitat within the potential disturbance area. Surveys and reporting shall be conducted following the current California Department of Fish and Wildlife protocol. If special-status plant species are identified within the Project construction disturbance area, then the biologist shall establish an appropriate buffer area for each plant population to exclude activities that directly remove or alter the habitat of, or result in indirect adverse impacts on, the special-status plant species. A qualified biologist shall oversee installation of a temporary, mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any established buffer areas to prevent encroachment by construction vehicles and personnel. The qualified biologist shall determine the exact location of the fencing. The fencing shall be strung tightly on posts set at maximum intervals of 10 feet (3 meters) and shall be checked and maintained weekly until all construction is complete. The buffer zone established by the fencing shall be marked by a sign stating: "This is habitat of [list rare plant(s)], and must not be disturbed. This species is protected by [the ESA of 1973, as amended/CESA/California Native Plant Protection Act]." If direct impacts cannot be avoided, the District shall prepare a plan for minimizing the impacts by one or more of the following construction; (2) salvage and replant plants at the same location following construction; (2) salvage and relocate the plants to a suitable off-site location with long-term assurance of site protection; (3) collect seeds or other propagules for reintroduction at the site or elsewhere; or (4) payment of fees in lieu of preservation of individual pl	Prior to and during construction.	District, Construction Contractor, and Qualified Biologist	District, USFWS, and CDFW	

		Implementation	Implementation	Verification	Compliance
Impact	Mitigation, Avoidance, and Minimization Measures	Timing	Responsibility	Responsibility	Verification Date
Biological Resources (cont.)					
Criterion a (cont.)	The success criterion for any seeded, planted, and/or relocated plants shall be full replacement at a 1:1 ratio after 5 years. Monitoring surveys of the seeded, planted, or transplanted individuals shall be conducted for a minimum of 5 years, to ensure that the success criterion can be achieved at year 5. If it appears the success criterion would not be met after 5 years, contingency measures may be applied. Such measures shall include, but not be limited to: additional seeding and planting, altering or implementing weed management activities, or introducing or altering other management activities. Any special-status plant species observed during surveys shall be reported to the CDFW and submitted to the CNDDB and reported to USFWS, if federally listed.				
	Mitigation Measure BIO-2: Best Management Practices for Biological Resources	Prior to and during construction	District, Construction Contractor, and	District	
	A qualified biologist (4-year college degree in biology or related field and demonstrated experience with the species of concern) shall provide Worker Environmental Awareness Training (WEAT) to field management and construction personnel. Communication efforts and training shall take place during pre-construction meetings so that construction personnel are aware of their responsibilities and the importance of compliance. WEAT shall identify the types of sensitive resources located in the project site and the measures required to avoid impacts on these resources. Materials covered in the training program shall include environmental rules and regulations for the specific Project, requirements for limiting activities to the construction right-of-way, avoiding demarcated sensitive resource areas, and appropriate steps to take if special-status species are encountered.		Qualified Biologist		
	If new construction personnel are added to the Project, the contractor shall ensure the new personnel receive WEAT before starting work. A sign-in sheet of those contractor individuals who have received the training shall be maintained by the District. A representative shall be appointed during the WEAT to be the contact for any employee or contractor who might inadvertently kill or injure a listed species or who finds a dead, injured, or entrapped individual.				
	All vehicle operators shall limit speed to 15 miles per hour (mph) within the Project site.				
	No erosion control materials shall contain any plastic or monofilament netting and shall be wildlife-friendly (e.g., movable joints). It shall also be biodegradable and have certified weed-free straw if that is a component of the netting.				

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cont.)					
Criterion a (cont.)	To avoid attracting predators, all food-related trash items shall be bagged and removed daily. Other trash shall also be properly stored at the end of each day and properly disposed by the end of the project.				
	Mitigation Measure BIO-3: Salt Marsh Harvest Mouse Protection	Prior to and during	District, Construction	District, USFWS,	
	 Ground disturbance to suitable salt marsh harvest mouse habitat (including, but not limited to pickleweed, and emergent salt marsh vegetation) shall be avoided to the extent feasible. Where salt marsh harvest mouse habitat cannot be avoided (such as for channel excavation, access routes and grading, or anywhere else that vegetation could be trampled or crushed by work activities), vegetation shall be removed to ground level from the ground disturbance work area plus a 5-foot buffer around the area, as well as any access routes within salt marsh harvest mouse habitat, utilizing mechanized hand tools or by another method approved by the USFWS and CDFW. Vegetation height shall be maintained at or below 5 inches above ground. Vegetation removal in salt marsh harvest mouse habitat shall be conducted under the supervision of the qualified biologist. Salt marsh harvest mouse marsh habitat that must be accessed by mini-excavators or other vehicles to complete Project construction (e.g., excavating smaller channels) shall be protected through use of low ground pressure (LGP) equipment, wooden or PVC marsh mats, 	construction	Contractor, and Qualified Biologist	and CDFW	
	or other method approved by the USFWS and CDFW following vegetation removal. Construction activities related to restoration and infrastructure shall be scheduled to avoid extreme high tides when there is potential for				
	salt marsh harvest mouse to move to higher, drier grounds, such as ruderal and grassland habitats. No Project activities shall be conducted within 50 feet of suitable tidal marsh or other salt marsh harvest mouse habitat during an extreme high tide event (6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tides) or when the adjacent marsh is flooded unless wildlife exclusion fencing has been installed around the work area.				
	All construction equipment and materials shall be staged on existing roadways and away from suitable salt marsh harvest mouse habitat when not in use. All construction equipment shall be visually inspected prior to work activities each day for signs of salt marsh harvest mouse or any other wildlife.				
	Vegetation shall be removed from all non-marsh areas of disturbance (driving roads, grading and stockpiling areas) to discourage the presence of salt marsh harvest mouse.				

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date	
Biological Resources (co	nt.)					
Criterion a (cont.)	A qualified biologist with previous salt marsh harvest mouse monitoring and/or surveying experience shall be on site during construction activities occurring in suitable habitat. The qualified biologist will have the authority to stop Project activities if any of the requirements associated with these measures are not being fulfilled. If a potential salt marsh harvest mouse is observed in the work area, construction activities shall cease in the immediate vicinity of the sighting. The individual shall be allowed to leave the area before work is resumed. If the individual does not move on its own volition, the qualified biologist would contact USFWS (and CDFW if appropriate) for further guidance on how to proceed. If the qualified biologist has requested work stoppage because of take					
	 If the qualified biologist has requested work stoppage because of take of any of the listed species, or if a dead or injured salt marsh harvest mouse is observed, the USFWS and CDFW shall be notified within 1 day by email or telephone. 					
	Mitigation Measure BIO-4: California Ridgeway's Rail and California Black Rain Protection	construction Contractor, Qualified Bi	District, Construction Contractor, and	District, USFWS, and CDFW		
	To minimize or avoid the loss of individual California Ridgway's rail and California black rail, construction activities, including vegetation management activities requiring heavy equipment, adjacent to the tidal marsh areas (within 500 feet [150 meters] or a distance determined in coordination with the USFWS or CDFW, shall be avoided during the breeding season from February 1 through August 31.		Qualified Biologist			
	 If areas within or adjacent to rail habitat cannot be avoided during the breeding season, protocol-level surveys shall be conducted to determine rail nesting locations. The surveys shall focus on potential habitat that could be disturbed by construction activities during the breeding season to ensure that rails are not breeding in these locations. 					
	 If protocol surveys determine that breeding California black rail and/or California Ridgway's rail are present in the project area, construction activities shall not occur within 500 feet of a detected Ridgway's rail or black rail call center during their breeding season (February 1- August 31) or measures shall be taken to limit the impact of noise and/or visual to not impact any nest (in consultation with CDFW and USFWS). 					
	 If no breeding California black rail or California Ridgway's rail are detected during surveys, or if their breeding territories can be avoided by 500 feet (150 meters), then Project activities may proceed at that location. 					

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cont.)					
Criterion a (cont.)	Mitigation Measure BIO-5: Nesting Bird Protection Removal of trees and scrub vegetation shall occur outside the bird nesting season (February 1 to August 31), to the extent feasible. If removal of trees and vegetation cannot be fully accomplished outside of the nesting season, a qualified biologist shall conduct preconstruction nesting surveys within seven (7) days prior to the start of such activities or after any construction breaks of 10 days or more. Surveys shall be performed for the Project site and suitable habitat within 330 feet of the Project site to locate any active raptor (birds of	Prior to and during construction District, Construction Contractor, and Qualified Biologist		District, USFWS, and CDFW	
	prey) nests or rookeries. If active nests are located during the pre-construction bird nesting survey, the qualified biologist shall evaluate if the schedule of construction activities could affect the active nests and the following measures shall be implemented based on their determination				
	 If construction is not likely to affect the active nest, it may proceed without restriction; however, a biologist shall regularly monitor the nest to confirm there is no adverse effect and may revise their determination at any time during the nesting season. In this case, the following measure would apply. 				
	If construction may affect the active nest, the biologist shall establish a no-disturbance buffer in coordination with CDFW. Typically, these standard buffer distances will start at 30 feet for passerines and 330 feet for raptors. These distances may be adjusted depending on the level of surrounding ambient activity (e.g., if the Project site is adjacent to a road or active trail) and if an obstruction, such as a building, is within line-of-sight between the nest and construction. For bird species that are federally and/or state-listed sensitive species (i.e., fully protected, endangered, threatened, species of special concern), a lead agency representative or qualified biologist shall coordinate with the USFWS and/or CDFW regarding modifications to nest buffers, prohibiting construction within the buffer, modifying construction, or removing or relocating active nests that are found on the site.				
	 Any birds that begin nesting within the Project site and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels. A qualified biologist shall coordinate with the USFWS and/or CDFW and determine if no work exclusion zones shall be established around active nests in these cases. 				

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cont.)					
Criterion a (cont.)	Mitigation Measure BIO-6: Western Pond Turtle Relocation Plan A detailed western pond turtle relocation plan shall be prepared at least 3 weeks before the start of groundbreaking, and submitted to the California Department of Fish and Wildlife for review. The purpose of the plan is to standardize turtle relocation methods and relocation sites. A qualified biologist shall be present at the active work sites until western pond turtles have been removed or relocated, and habitat disturbance has been completed.	Prior to and during construction	District, Construction Contractor, and Qualified Biologist	District and CDFW	
	Mitigation Measure BIO-7: In-water Work Window All in-water construction shall be conducted within the established environmental work window between June 1 and November 30, designed to avoid potential impacts on fish species.	Prior to and during construction	District, Construction Contractor, and Qualified Biologist	District	
	Mitigation Measure BIO-8: Fish Protection during Construction Fish and other aquatic species shall be excluded from occupying the area to be impacted during construction by using silt curtains or blocking the stream channel above and below the area to be dewatered with fine-meshed block nets or screens while coffer dams and other diversion structures are being installed. Block net mesh shall be sized to ensure aquatic species upstream or downstream do not enter the areas proposed for dewatering. Mesh will be no greater than 3/32-inch diameter. The bottom of the net must be completely secured to the channel bed. Block nets or screens must be checked at least twice daily at the beginning and end of the workday and cleaned of debris to permit free flow of water. Block nets or screens shall be placed and maintained throughout the dewatering period at the upper and lower extent of the areas where aquatic species will be removed. Net placement is temporary and shall be removed once dewatering has been accomplished or construction work is complete for the day. Before commencement of dewatering the District shall develop a fish relocation plan, consistent with applicable federal and state permit requirements. Relocation shall be required for in-water work in the Novato Creek channel. The plan shall be prepared in coordination with the NMFS and CDFW. Implementation of the fish relocation plan shall be consistent with the following conditions: Before rescues of steelhead are attempted, any necessary authorization shall be obtained from the resource agencies (CDFW and/or NMFS). Before dewatering may occur, a qualified biologist shall determine whether the extent of dewatering will result in immediate or foreseeable impacts on fish and aquatic wildlife. This shall include conducting a reconnaissance survey of the dewatering zone.	Prior to and during construction	District, Construction Contractor, and Qualified Biologist	District, USFWS, CDFW, and NMFS	

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cont.)					
Criterion a (cont.)	Before dewatering can begin, the following elements of fish relocation shall be determined: Staging Area: Staging areas in the dewatering zone shall be identified. Sites should be selected based on their proximity and access to the dewatering zone and ability to support safe operation of the equipment. Relocation Sites: Relocation site(s) shall be identified. Priority shall be given to a site's close proximity to the dewatering zone in the same stream. If a qualified onsite biologist determines that no suitable site in the stream is available, then "second choice" locations within the watershed shall be selected. In all cases, the closest site that is likely to result in a successful rescue shall be used. Transportation Routes: Transport routes for rescued fish species shall be determined in advance of dewatering. Disease Consideration: To guard again disease transmission, fish shall not be moved upstream beyond substantial barriers or long distances. If steelhead are encountered during relocation, they shall be moved upstream within the channel to a location of perennial running water or the best available habitat determined by a qualified biologist. Collection and transport methods shall be determined based onsite conditions. Methods shall also be selected to maximize the efficiency of the collection effort while minimizing handling and transport time and stress. Creek water from the site shall be used in all containers. The local transport of fish may be completed using various methods, including: Net Transfer: Appropriate for short distances (less than 50 feet) where rapid transfer is possible. Live Car. Appropriate for temporary holding and transport over short to medium distances. Holding time should be minimized if possible and aeration should be supplied. Aerated Cooler: Appropriate for temporary holding and transport. Temperature shall be maintained to be similar to the temperature of the source creek water, and if necessary, fish shall be sorted by size to reduce risks of predation.				

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cor	nt.)				
Criterion a (cont.)	A Contact person as each of the appropriate resource agencies (CDFW, NMFS, and/or USFWS) shall be identified in the relocation plan. At least 24 hours before fish relocation begins, the appropriate resource agencies shall be notified to communicate the details of the fish relocation and to confirm disposition instructions.				
	Fish shall be relocated under the following conditions:				
	 Setup: Upon arrival at the site, a qualified biologist shall review the operational sequence and logistics of the rescue and field assignments shall be designated. The fish relocation team shall review safety and operational methods. 				
	Live Well Operation:				
	 If necessary, live wells shall be set up early in the operation to stabilize tank conditions. 				
	 Local "native" water shall be used to fill live wells, if available and clean. 				
	 To lessen stress on fish, the temperature in live wells shall be reduced or managed to be compatible with the water temperatures in which the fish were encountered. 				
	To ensure that sufficient oxygen is present during the adjustment period, the aeration system shall be started before fish are placed into the live well. When salmonids are placed in the live well, the live well shall be managed to the extent possible so that the dissolved oxygen concentration is greater than 6 milligrams per liter, but less than saturation.				
	General Collection Guidelines:				
	 Fish shall be collected in a manner to minimize handling time and stress, yet maintain the safety of personnel. 				
	 Multiple buckets and /or live cars shall be used to reduce crowding during collection and transfer. 				
	 Fish shall be pre-sorted as needed for transport. 				
	 Buckets that hold steelhead shall be equipped with portable aerators until the fish are transferred to a live well. 				
	- Transport:				
	 Fish shall be transported to minimize holding time and alternatively sequenced in tandem with ongoing collection activities. 				
	 Normal live well operations shall continue during transport. 				

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date		
Biological Resources (cont.)	Biological Resources (cont.)						
Criterion a (cont.)	 Records and Data: Fish shall be inventoried and pertinent data shall be recorded, including species, numbers of each species, disposition, and fork length. If conditions preclude a complete inventory, at a minimum, the species present and their disposition shall be documented and their abundance shall be estimated. Information on ambient site conditions (available habitat/water quality) shall be recorded as appropriate, including photo documentation at collection and release sites and other information on collection, handling, and transport. At completion, a qualified biologist shall conduct an assessment of the fish relocation to identify lessons learned, estimate the number of individual fish and fish species moved, and determine the mortality rate. The assessment report shall be forwarded to the appropriate resource agencies within a month of the completion of in-water work. 						
	Mitigation Measure BIO-9: Bat Protection A day-time pre-construction survey shall be conducted by a Qualified Biologist within one (1) year of the tree coming down. Only trees with a diameter at breast height larger than 10-inches shall be treated at potential bat roosting habitat. The survey shall determine if the tree has suitable bat roosting habitat and look for signs of bat use. If no suitable bat roosting habitat is observed, the tree can come down without any other bat protections. If the tree has suitable bat roosting habitat, efforts shall be made to remove the tree outside of the maternity (April 15-August 31) and winter (October 15-March 1) roosting seasons after a night-time bat roosting survey. The night-time bat roosting survey shall take place within seven (7) days of the tree coming down and shall be conducted 30 minutes before and after sunset. If bats are found to be roosting in the tree during that time, a two-step method of removal shall be implemented. Trees with potential roosting bats that will be removed outside of the maternity and winter roosting seasons, can be removed using a two-step process over two consecutive days (e.g., Monday and Tuesday, or Thursday and Friday). Small branches or limbs that do NOT contain cavities, crevices, or exfoliating bark on the habitat trees, and are identified by a Qualified Biologist, are removed first on Day 1 using a chainsaw. A Qualified Biologist will remain on-site during the Day 1 process to ensure the people who are cutting the tree understand the process and avoid incorrectly cutting potential habitat features or trees. Once the people cutting the trees have had sufficient field supervision and training by the Qualified Biologist, the Qualified Biologist does not need to remain on site. On the following day, Day 2, the remainder of the	Prior to and during construction	District, Construction Contractor, and Qualified Biologist	District			

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cont.)					
Criterion a (cont.)	tree is to be removed. The disturbance caused by chainsaw noise and vibration, coupled with the physical alteration, has the effect of causing colonial bat species to abandon the roost tree after nightly emergence for foraging. Removing the tree the next day prevents re-habituation and re-occupation of the altered tree.				
	If the tree cannot be removed outside of the roosting seasons, exclusionary measures shall be put into place on any tree with potential bat roosting habitat, prior to any roosting seasons. The timing and other methods of exclusionary activities shall be developed by the Qualified Biologist in order to reduce the stress on the bats to the amount feasible while taking into account Project schedule. Exclusionary devices, such as plastic sheeting, plastic or wire mesh, may be used to allow for bats to exit but not re-enter any occupied roosts, if applicable. A Qualified Biologist shall also be notified and present during any tree removal or tree trimming.				
Criterion b): Have a	Mitigation Measure BIO-10: Tree Replacement Requirements		District and Qualified Biologist	District, USFWS, and CDFW	
substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Trees removed or that die due to project impacts, such as root compaction from construction or salinity intrusion, shall be replaced at a 5:1 ratio for native oak trees more than 12 inches in diameter at breast height (DBH) and 3:1 ratio for all other trees more than 12 inches DBH at an ecologically appropriate site identified by the District. Replacement trees shall be monitored for survival in Years 1, 3, and 5 post-construction. Trees should be sourced from the Novato Creek Watershed if feasible and obtained from a nursery that implements best management practices to reduce chances of pest and pathogen contamination, such as Phytophthora, within their nursery.				
Criterion c): Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Mitigation Measure BIO-11: Develop and Implement a Monitoring and Adaptive Management Plan The District shall develop and submit a Monitoring and Adaptive Management Plan to be implemented during the monitoring period to assure desired outcomes. The plan shall be submitted to the CDFW, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers prior to the start of construction. Elements of this plan shall be based upon final project design and construction documents. The plan shall include description of protocols for monitoring vegetation and geomorphology to evaluate project performance, monitoring schedule, performance criteria and thresholds that would trigger adaptive management actions, and reporting. Physical and biological monitoring would be conducted at the completion of the Project at years 1, 3, and 5 post-construction. Percent cover of vegetation will be monitored within the different habitat types at the project site including the tidal marsh. An annual report shall be prepared and provided to the above-listed regulatory agencies in each year that post-construction monitoring is conducted.	Prior to, during, and post- construction	District and Construction Contractor	District, RWQCB, USACE, and CDFW	

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Biological Resources (cont.)					
Criterion e): Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	See Mitigation Measure BIO-10, above.	During and post- construction	District, USFWS- and CDFW- approved biologist	District, USFWS, and CDFW	
Cultural Resources					
Criterion b): Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5	Mitigation Measure CUL-1: Cultural Resources Awareness Training Before any ground-disturbing and/or construction activities, an archaeologist meeting, or under the supervision of an archaeologist meeting, the Secretary of the Interior's Professional Qualifications Standards (SOI PQS) for Archeology, shall conduct a training program for all construction and field personnel involved in Project-related ground-disturbing activities. If a California Native American Tribe expresses interest, they shall be invited to participate in the training program. On-site personnel shall attend the training prior to commencement of any ground-disturbing activities. The training shall outline the general archaeological sensitivity of the Project site and the procedures to follow in the event an archaeological resource and/or human remains are inadvertently discovered. Documentation of the training attendance shall be maintained by the District.	Prior to construction	District and Secretary of the Interior-qualified archaeologist	District	
	Mitigation Measure CUL-2: Cultural Resources Construction Monitoring An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards (SOI PQS) for Archeology, in coordination with California Native American Tribes traditionally and culturally affiliated with the Project site that have requested participation, shall prepare a Cultural Resources Monitoring Plan to describe the locations, methods (including inadvertent discovery protocol [i.e., City of Novato Municipal Code Sections 4-7.3(b), 4.7.5, and 4.7-6]), and reporting for cultural resources construction monitoring. The construction monitoring shall focus on Project-related ground-disturbing activities within existing levee prisms. The monitoring shall be conducted by an archaeologist meeting, or under the supervision of an archaeologist meeting, the SOI PQS for Archeology. Daily monitoring logs shall be prepared detailing the monitoring activities and findings. The District shall invite a California Native American Tribe to participate in the construction monitoring. A Cultural Resources Monitoring Results Report (CRMRR) summarizing the results of the monitoring shall be prepared by an archaeologist meeting the SOI PQS for Archeology. The CRMRR shall be submitted to	During construction	District and Secretary of the Interior-qualified archaeologist	District	

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Cultural Resources (cont.					1
Criterion b (cont.)	the NWIC upon District review and approval. If any archaeological resources are inadvertently discovered during Project-related construction activities not on or in the tide and submerged lands of California, the procedures outlined for inadvertent discovery protocol for archaeological resources and human remains (in the City of Novato Municipal Code Sections 4-7.3(b), 4.7.5, and 4.7-6, as well as those in Mitigation Measure TRI-1) shall be followed. If a shipwreck, and associated artifacts, or other cultural resource on or in the tide and submerged lands of California is encountered during Project construction or operation, the following measures shall also be implemented:				
	 The District shall initiate consultation with California State Lands Commission (CSLC) staff within two business days of the discovery. Per PRC Section 6313(c), any submerged cultural resource remaining in State waters for more than 50 years shall be presumed 				
	to be archaeologically or historically significant. If the find is a maritime archaeological resource, the qualified archaeologist assessing the find shall have expertise in maritime archaeology.				
	The District shall consult with the CSLC regarding assessment of the find and development of any treatment measures to minimize or mitigate potential impacts on the resource, pursuant to PRC Section 21083.2 and CCR Section 15126.4. Treatment measures would typically consist of (but would not necessarily be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be affected by the proposed project. The District shall prepare a treatment plan to document the treatment measures and their implementation methods. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries,				
	and interested professionals. Any treatment measures implemented shall be documented in a professional-level technical report (e.g., archaeological testing results report, archaeological data recovery report, ethnographic report) authored by a qualified archaeologist, to be filed with the CHRIS. Project construction work at the location of the find may commence upon completion of the approved treatment and authorization by the District. Work may proceed in other parts of the Project site while the mitigation is being carried out.				

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Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date	
Cultural Resources (cont.)						
Criterion b (cont.)	The District shall submit to the CSLC any report prepared for the resource as part of the assessment of the find and implementation of treatment measures to minimize or mitigate potential impacts.					
	 The final disposition of archaeological, historical, and paleontological resources recovered on State land under the jurisdiction of the CSLC must be approved by the Commission. 					
Greenhouse Gas Emissions						
Criterion b): Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	See Mitigation Measure AQ-1: Implement BAAQMD Basic Construction Mitigation Measures, above.	During construction	District and Construction Contractor	District and BAAQMD		
Tribal Cultural Resources						
Criterion a.i): Listed or eligible for listing in the California Register of	See Mitigation Measure CUL-1: Cultural Resources Awareness Training, above.	Prior to construction	District, Secretary of the Interior-qualified archaeologist,	District, Marin County Coroner, and NAHC		
Historical Resources, or in a	See Mitigation Measure CUL-2: Cultural Resources Construction Monitoring, above.	During construction	Construction	and NAME		
local register of historical resources as defined in Public Resources Code	Mitigation Measure TRI-1: Inadvertent Discovery Protocol for Native American Resources		contractor, and Marin County Coroner			
Section 5020.1(k)	If Native American archaeological resources are encountered during Project construction, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the SOI PQS for Archeology, and any California Native American Tribes participating in construction monitoring, shall inspect the find within 24 hours of discovery and notify the District of their initial assessment. Native American archaeological materials might include: obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones); and battered stone tools, such as hammerstones and pitted stones.					
	If any Native American cultural resources are encountered on or in the tide and submerged lands of California during Project construction or operation, the measures related to unanticipated discoveries of cultural resources on or in the tide and submerged lands of California provided in Mitigation Measure CUL 2 shall also then be implemented.					

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date	
Tribal Cultural Resources (con	t.)					
Criterion a.i) (cont.)	For Native American cultural resources encountered in areas not on or in the tide and submerged lands of California during Project, if the District determines, based on recommendations from the qualified archaeologist and California Native American Tribes that are traditionally and culturally affiliated with the Project site, that the resource may qualify as a tribal cultural resource (as defined in PRC Section 21074), the resource shall be avoided, if feasible. Consistent with CEQA Guidelines Section 15126.4(b)(3), this may be accomplished through: planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance of the resource is not feasible, the District shall continue to consult with California Native American Tribes that are traditionally and culturally affiliated with the Project site to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). Any technical report developed to document the implementation mitigation shall be submitted to the NWIC upon District approval, unless the document contains information that California Native American Tribes involved in the development of the mitigation deem should not be filed with the NWIC, in which case, the report shall be submitted to the NAHC.					
Criterion a.ii): A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	See Mitigation Measure CUL-1: Cultural Resources Awareness Training, above. See Mitigation Measure CUL-2: Cultural Resources Construction Monitoring, above. See Mitigation Measure TRI-1: Inadvertent Discovery Protocol for Native American Resources, above.	Prior to construction During construction	District, Secretary of the Interior-qualified archaeologist, Construction contractor, and Marin County Coroner	District, Marin County Coroner, and NAHC		

CHAPTER 3

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