TISCORNIA MARSH HABITAT RESTORATION AND SEA LEVEL RISE ADAPTATION PROJECT

Final EIR (Responses to Comments)
SCH # 2021020362
City Case No. UP21-001, ED21-002, IS21-001
Canal Street/Spinnaker Point Drive

Prepared for
City of San Rafael

December 2021

ESA

TISCORNIA MARSH HABITAT RESTORATION AND SEA LEVEL RISE ADAPTATION PROJECT

Final EIR (Responses to Comments)
SCH # 2021020362
City Case No. UP21-001, ED21-002, IS21-001
Canal Street/Spinnaker Point Drive

Prepared for
City of San Rafael

December 2021

550 Kearny Street
Suite 800
San Francisco, CA 94108
415.896.5900
esassoc.com

ESA

Bend	Orlando	San Jose
Camarillo	Pasadena	Santa Monica
Delray Beach	Petaluma	Sarasota
Destin	Portland	Seattle
Irvine	Sacramento	Tampa
Los Angeles	San Diego	
Oakland	San Francisco	

D201600888.01

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project

This page intentionally left blank

CHAPTER 1
Introduction

1.1 Purpose of the Responses to Comments Document

This Responses to Comments document completes the Final Environmental Impact Report (Final EIR) analyzing potential environmental effects associated with the proposed Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project.

The Draft EIR together with this Responses to Comments document constitutes the Final EIR for the Project in fulfillment of CEQA requirements as consistent with CEQA Guidelines Section 15132. This Responses to Comments document contains the following: (1) a list of persons, organizations, and public agencies commenting on the Draft EIR; (2) copies of comments received on the Draft EIR; (3) the City of San Rafael's responses to those comments; and (4) revisions to the Draft EIR to clarify or correct information. See Section 1.3, below, for a description of the overall contents and organization of the Responses to Comments document.

The EIR has been prepared pursuant to the requirements of CEQA (Pub. Res. Code §21000 et seq.); the CEQA Guidelines (14 Cal. Code Regs. §§15000 to 15387). The EIR is an informational document for use by (1) governmental agencies (in addition to the City of San Rafael) and the public to aid in the planning and decision-making process by disclosing the physical environmental effects of the Project and identifying possible ways of reducing or avoiding the potentially significant impacts; and (2) the City of San Rafael's Planning Commission prior to its decision to approve, disapprove, or modify the proposed Project. If the Planning Commission approves the proposed project, it would be required to adopt CEQA findings and a mitigation monitoring and reporting program (MMRP) to ensure that mitigation measures identified in the Final EIR are implemented. See Section 1.2, below, for further description of the environmental review process.

In accordance with CEQA, the responses to comments address environmental issues raised in public comments that concern the adequacy or accuracy of the EIR. These issues include physical impacts or changes attributable to the project rather than any social or financial implications of the project. Therefore, this document provides limited responses to comments received during the public review period that do not relate to the adequacy or accuracy of the EIR.

1.2 Environmental Review Process

1.2.1 Notice of Preparation and Scoping

In accordance with Section 15082 of the CEQA Guidelines, the City, as the CEQA lead agency, prepared and disseminated a notice of preparation (NOP) for this EIR. The NOP contains a description of the Proposed Project, a summary of existing conditions at the Project location, maps of the Project site, and a summary of the probable environmental effects of the Proposed Project to be addressed in the EIR, as well as instructions for joining the scoping meeting and for submitting written comments. On January 25, 2021, the NOP was mailed to interested parties, including individuals, and to federal, state, and local agencies, and was posted by the California State Clearinghouse beginning on February 19, 2021 and by the Marin County Clerk. The 30-day scoping period for the Project remained open through February 26, 2021. On February 23, 2021, the City held a Project scoping and update meeting to receive comments on the scope of the EIR.

The City received three comment letters from federal and state agencies and local organizations during the comment period.

1.2.2 Draft EIR

The Draft EIR was made available for review and comment by federal, state, and local agencies and interested organizations and individuals for a 45-day period identified, starting on September 10, 2021. Notice of the Draft EIR was published in the Marin Independent Journal's Legal Notice section on September 10, 2021. Notice of the Draft EIR has also been sent directly to every agency, person, or organization that commented on the NOP. During the public comment period, written comments on the adequacy of the Draft EIR were be submitted electronically to:

Theo Sanchez, Associate Civil Engineer
City of San Rafael
Theo.Sanchez@cityofsanrafael.org

All written comments were received by the City by Tuesday, October 26, 2021, at 5:00pm. During the 45-day review period, copies of the Draft EIR were made available for public review at the City of San Rafael, Tiscornia Marsh Project Website:

https://www.cityofsanrafael.org/tiscornia-marsh/

The City also conducted a public hearing to receive oral comments on the adequacy of the analysis included in the Draft EIR. The meeting was held on:

Date: Tuesday, October 26, 2021
Time: 7:00 p.m.
Location: www.youtube.com/cityofsanrafael.

1.2.3 Responses to Comments and Final EIR

The City staff distributed this Responses to Comments document for review to the City's Planning Commission, and notified individuals and organizations that commented on the Draft EIR and well as other interested parties that the Response to Comments document was available for review on the City's website. Following completion of the Final EIR, the Planning Commission will consider certification of the Final EIR, and will decide whether to approve or deny the Project. CEQA also requires the adoption of findings prior to project approval in cases where the certified EIR identifies significant environmental effects (CEQA Guidelines §§15091 and 15092) and a MMRP (§15097). The findings must include a statement of overriding considerations for any impact identified in the EIR as significant adverse impacts that cannot be mitigated to less-than-significant levels (CEQA Guidelines §15093[b]). The City is required to adopt CEQA findings and the MMRP prior to approving the proposed project.

1.3 Agency-Initiated Project Description Revisions

The City of San Rafael does not propose Project Description Revisions as part of this Response to Comments document.

1.4 Document Organization

This Responses to Comments document consists of four chapters, plus supplemental attachments, as follows:

- **Chapter 1, Introduction.** This chapter summarizes the purpose of the Responses to Comment and the ongoing and environmental review process to date.
- **Chapter 2, List of Persons Commenting.** This chapter summarizes the state and local agencies, as well as the non-governmental organizations and individuals that commented on the Draft EIR.
- **Chapter 3, Comments and Responses.** This chapter presents the comment letters received during the Draft EIR comment period and responses to those comments.
- **Chapter 4, Draft EIR Revisions.** This chapter displays the changes made to the text of the Draft EIR in response to agency-initiated project-description revisions, comments on the Draft EIR, and included to clarify the Draft EIR text.

This page intentionally left blank

CHAPTER 2
List of Persons Commenting

This Responses to Comments document is organized to respond to all written comments received on the Draft Environmental Impact Report (EIR). No oral comments were provided during the public hearing held on October 26, 2021. This section lists all organizations and individuals that submitted comments on the Draft EIR. Commenters are generally grouped according to whether they commented as individuals or represented a public agency or non-governmental organization.

2.1 Agencies

- California Department of Fish and Wildlife; Stephanie Fong, Acting Regional Manager, Bay Delta Region; and Craig Shuman, Regional Manager, Marin Region (October 22, 2021) (Comment Letter A-1)

2.2 Individuals

- Eva Calderon (October 25, 2021) (Comment Letter I-1)
- Anna Costello (October 18, 2021) (Comment Letter I-2)
- Kristi Denham (October 18, 2021) (Comment Letter I-3)
- Lori Johnson (October 18, 2021) (Comment Letter I-4)
- Jonathan Knight (October 18, 2021) (Comment Letter I-5)
- Jess Lerner (October 18, 2021) (Comment Letter I-6)
- Taylor Newcomb (October 18, 2021) (Comment Letter I-7)
- Marina Palma (October 25, 2021) (Comment Letter I-8)
- Cristina Rosales (October 25, 2021) (Comment Letter I-9)
- Darlin Ruiz (October 25, 2021) (Comment Letter I-10)
- Blanca Salinas (October 25, 2021) (Comment Letter I-11)
- Aurelia Vargas (October 25, 2021) (Comment Letter I-12)
- Warren Weisenburg (October 26, 2021) (Comment Letter I-13)

This page intentionally left blank

CHAPTER 3
Comments and Responses

3.1 Introduction to the Analysis

This section presents the comment letters received during the Draft Environmental Impact Report (EIR) comment period, summarizes the substantive comments, and responses to those comments. The comments and responses are organized as listed in Chapter 2.

Responses have been numbered corresponding to bracketed numbers printed on the comment letters. Responses are provided to address issues raised in the comment concerning the adequacy or accuracy of the EIR, and to clarify or augment information in the Draft EIR as appropriate. Where responses refer to changes to the text of the Draft EIR made as a staff-initiated text change, in response to comments on the Draft EIR, or to clarify the Draft EIR text, new language is underlined, while deleted text is shown in ~~strikethough~~. The text revisions are also included in Chapter 4, EIR Text Revisions.

This page intentionally left blank

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534

Marine Region
1933 Cliff Drive, Suite 9
Santa Barbara, CA 93109
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

October 22, 2021

Mr. Paul Jensen, Development Director
City of San Rafael, Community Development Department
1400 Fifth Avenue
San Rafael, CA 94901
Paul.Jensen@cityofsanrafael.org

Subject: Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project, Draft Environmental Impact Report, SCH No. 2021020362, City of San Rafael, Marin County

Dear Mr. Jensen:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) for the Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project (Project) pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.; hereafter CEQA; Cal. Code Regs., §15000 et seq.; hereafter CEQA Guidelines).

Thank you for the opportunity to provide comments and recommendations regarding those activities included in the Project that are within CDFW's area of expertise and relevant to its statutory responsibilities (Fish & G. Code, § 1802), and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096 & 15204).

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed

alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in take[1] as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

CDFW is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California.

PROJECT DESCRIPTION SUMMARY

Proponent: City of San Rafael

Objective: The goal of the proposed Project is to enhance the ecological function of the Tiscornia Marsh property and to increase flood protection for the nearby Canal neighborhood of San Rafael, while maintaining the community value of the Albert J. Boro Community Center and Pickleweed Park. Specific objectives include:

- Restoring tidal marsh on the Project site to improve ecological function and habitat quantity, quality, and connectivity (including upland transition zones) for native marsh species and marsh-upland transition species, including special-status species.
- Protecting Project site marshlands from future marsh edge erosion.
- Increasing the level of flood protection for the Canal neighborhood and other nearby communities of Central San Rafael.
- Creating sustainable benefits that consider future environmental changes such as sea level rise and sedimentation.
- Maintaining and improving public access to passive recreational and outdoor education opportunities (e.g., hiking, jogging, and bird watching).

The proposed Project will restore Tiscornia Marsh to its former extent by beneficially reusing dredged material from local sources. A course beach will be constructed along the bayside edge of the restored marsh to resist future erosion. Tidal action will be restored to the diked marsh at the north end of Pickleweed Park. The Project will reconstruct approximately 4 acres of eroded tidal marsh; preserve and protect the approximately 8 remaining acres of Tiscornia Marsh; and restore approximately 5 acres of diked marsh by reconnecting it to tidal inundation. The Project will also construct a

[1] Take is defined by Fish and Game Code section 86 as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

new levee measuring approximately 600 feet in length on the south side of the existing diked marsh and improve approximately 1,100 feet of shoreline levee to achieve greater flood protection, public access, and habitat benefits.

Location: The proposed Project is located along the northern boundary of the Canal neighborhood in central San Rafael, Marin County, at Assessor's Parcel Numbers (APNs) 009-142-01, 009-032-06, 009-032-08, and 009-032-09. Tiscornia Marsh is bounded by Albert J. Boro Community Center and Pickleweed Park on the west; the mouth of San Rafael Creek which transitions to San Rafael Bay on the north; the former Schoen Park south of the Tiscornia Marsh shoreline levee; and Spinnaker Drive on the southeast.

Timeframe: The Project is anticipated to be completed in three phases, beginning in 2023 and likely finishing in 2026 or 2027.

ENVIRONMENTAL SETTING

Marine Biological Significance

The San Francisco Bay-Delta is the second largest estuary in the United States and supports numerous aquatic habitats and biological communities. It encompasses 479 square miles, including shallow mudflats. This ecologically significant ecosystem supports both state and federally threatened and endangered species and sustains important commercial and recreational fisheries.

State and Federally Listed and Commercially/Recreationally Important Species

Protected species under the State and Federal Endangered Species Acts that could potentially occur within and adjacent to the Project area include:

- Chinook salmon (*Oncorhynchus tshawytscha*), federal and State threatened (Spring-run), federal and State endangered (Winter-run)
- Steelhead (*O. mykiss*), federal threatened (Central California Coast and Central Valley Evolutionarily Significant Units)
- Green sturgeon (*Acipenser medirostris*), federal threatened and State species of special concern (southern Distinct Population Segment)
- Longfin smelt (*Spirinchus thaleichthys*), federal candidate and state threatened
- Brown pelican (*Pelecanus occidentalis californicus*), state fully protected
- California Ridgway's rail (*Rallus obsoletus obsoletus*), federal and State endangered and State fully protected
- California black rail (*Laterallus jamaicensus coturniculus*), State threatened and

State fully protected

- Salt Marsh Harvest Mouse (*Reithrodontomys raviventris),* federal and State endangered and State fully protected

Several species with important commercial and recreational fisheries value that could potentially be impacted by Project activities include:

- Dungeness crab (*Cancer magister*)
- Pacific herring (*Clupea pallasii*)
- Rockfish (*Sebastes* spp.)
- California halibut (*Paralichthys californicus*)
- Surfperches (*Embiotocidae*)

The Project site is characterized by a variety of vegetative and non-vegetative communities, including ruderal/non-native grassland/turf dominated by non-native grasses and forbs; coastal scrub dominated by California sagebrush (*Artemesia* californica) and coyote brush (*Baccharis pilularis*) but also including invasive pride of madeira (*Echium candicans*), dwarf mallow (*Malva neglecta*), and Canarian sea lavender (*Limonium perezii*); scattered native and non-native trees such as coast live oak (*Quercus agrifolia*), black oak (*Q. kelloggii*), sweet gum (*Liquidambar styraciflua*), Canary Island date palm (*Phoenix canariensis*), and acacia (*Acacia* sp.); landscaped areas such as soccer field turf, mowed grass, wood chips; developed areas such as paved and unpaved trails; low tidal marsh dominated by California cordgrass (*Spartina foliosa*); mid-high tidal marsh zones dominated by pickleweed (*Salcornia* pacifica) but also including jaumea (*Jaumea carnosa*), salt grass (*Distichlis spicata*), alkali heath (*Frankenia salina*), and gumplant (*Grindelia stricta*); diked marsh dominated by pickleweed as well as salt grass, alkali heath, fat hen (*Atriplex prostrata*), and rabbitsfoot grass (*Polypogon monspeliensis*); tidal waters comprised of the mouth of San Rafael Creek, San Rafael Bay, small tidal marsh channels, mudflat; and a small, created pond in the northwest corner near San Rafael Creek.

COMMENTS AND RECOMMENDATIONS

Comment 1: Lake and Streambed Alteration Agreement

CDFW requires a Lake and Streambed Alteration (LSA) Notification, pursuant to Fish and Game Code section 1600 et. seq., for Project activities affecting lakes or streams. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake, or stream. For the Project described

in the DEIR, activities that may directly or indirectly impact San Rafael Creek will be subject to Fish and Game Code section 1600 et. seq. Notification.

Comment 2: Mitigation Measure 3.4-1: General Construction-related Mitigation Measures

Issue: Mitigation Measure 3.4-1 states that a qualified biologist only has a 4-year degree in biology or a related field with demonstrated experience with the species of concern. This requirement would not meet CDFW recommendations for approving biological staff for a Project that may be subject to CDFW's regulatory authority.

Recommendation: CDFW recommends that Mitigation Measure 3.4-1 include a condition that the biologist's name and qualifications be provided to CDFW, and other approving agencies, for review and approval prior to being assigned as the lead biologist for Project-related monitoring and training activities. Qualifications that may be considered acceptable for qualified biologists include a minimum of five years of academic training and professional experience in biological sciences and related resource management activities, with a minimum of two years conducting surveys for each species that may be present in the Project area. A-1-1

Comment 3: Mitigation Measure 3.4-2: Avoid and Minimize Impacts on California Black Rail and California Ridgway's Rail

Issue: Mitigation Measure 3.4-2 states that construction activities within 500 feet of tidal marsh areas will be avoided during rail breeding season (February 1 through August 31). Disturbance of incubating or brooding adults may translate into reduced hatch or fledge success of young through increased nest predation if the adult vacates the nest, or through temperature stress due to lack of thermoregulation by the adult. In addition, continued disturbance may stress the adults and reduce survival through disruption of normal activities, such as reduced foraging or resting time or increased susceptibility to predators (USFWS 2013).

Recommendation: To reduce the likelihood of Project-related impacts to incubating or brooding adults and fledglings, CDFW recommends including a 700-foot no-activity buffer from identified breeding rail calling centers during the rail breeding season. This buffer is described in the Suisun Marsh Habitat Management, Preservation, and Restoration Plan (USBR, USFWS, and CDFW 2013). A-1-2

Issue: Mitigation Measure 3.4-2 also states that if a California black rail or California Ridgway's rail vocalizes or flushes within 10 meters (32.8 feet), it is possible that a nest or young may be nearby. The DEIR goes on to state that if

an alarmed bird or nest is detected, work will be stopped. It is not clear what the rationale is of including the reference to a distance of 10 meters in the measure. It is reasonable to assume that Project activities may disturb breeding rails located further away than 10 meters from the source of disturbance, and that rails may vocalize or flush accordingly.

Recommendation: CDFW recommends that the measure be revised to be clear that the qualified biologist will have authority to stop work if they determine that Project activities have caused any rails to vocalize or flush, regardless of distance of the rails from work activities, or if a rail nest is detected within 700 feet of work activities.

Issue: Mitigation Measure 3.4-2 also states that rail breeding surveys will be conducted following the *Site-Specific Protocol for Monitoring Marsh Birds* developed by the Don Edwards San Francisco Bay and San Pablo Bay National Wildlife Refuges. Please be aware that per USFWS staff, this 2017 monitoring protocol was developed for research-based projects that include a long-term monitoring component and is not appropriate for presence/absence surveys.

A-1-3

Recommendation: CDFW recommends that the June 2015 *California Clapper Rail Survey Protocol* developed by the U.S. Fish and Wildlife Service (USFWS) San Francisco Bay-Delta Fish and Wildlife Office (USFWS 2015) be used for presence/absence surveys. As this 2015 protocol does not include playback calls for California black rail, CDFW is available to work with you to incorporate calls for that species into the protocol to ensure that both rail species are included in the surveys.

Comment 4: Mitigation Measure 3.4-4: Avoid and Minimize Impacts on Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew

Issue: Mitigation measure 3.4-4 states that mechanized hand tools or another method approved by CDFW and USFWS will be used in vegetation removal in salt-marsh harvest mouse habitat. Please be advised that CDFW is aware that mechanized hand tools have resulted in mortality and/or injury to salt-marsh harvest mice and other species during vegetation removal for other projects in the Bay Area.

Recommendation: CDFW recommends the use of non-mechanized hand tools for vegetation removal activities in salt-marsh harvest mouse habitat to the maximum extent practicable. If the exclusive use of non-mechanized hand tools is not practical due to the scale of the Project, the use of mechanized hand tools may be possible in combination with a phased approach. The vegetation would be initially disturbed using non-mechanized instruments such as the handles of

A-1-4

brooms or rakes (or something similar) to allow individuals to move out of harm's way and allow inspection by a qualified biologist, followed by an initial cut of the top layers of vegetation. The process would be repeated until the vegetation is low enough that the qualified biologist could then inspect the remaining vegetation down to ground-level. Once the qualified biologist determined that mice or nests are not present, then the vegetation removal crew could proceed with mechanized hand tools.

Issue: Mitigation Measure 3.4-4 does not describe a limit to the number of workers removing vegetation relative to the number of qualified biologists/monitors present. CDFW is aware that in some projects, vegetation removal has proceeded at a faster rate than one or two qualified biologists/monitors can effectively inspect vegetation for the presence of mice and nests, particularly when mechanized hand tools were utilized.

Recommendation: CDFW recommends limiting the number of vegetation removal workers relative to the number of qualified biologist/monitors present to ensure that the ability of the qualified biologists/monitors to effectively view and detect mice and/or nests is maximized. Due to the rapid rate that vegetation removal can occur, particularly if non-mechanized hand tools are used, a suggested ratio of vegetation removal workers to qualified biologists/monitors is 3:1. It may be appropriate to increase this ratio if the vegetation removal is conducted strictly with non-mechanized hand tools.

A-1-4 cont.

Comment 5: Mitigation Measure 3.4-6 – Fish and Marine Mammal Protection During Pile Driving

Issue: Mitigation measure 3.4-6 specifies that the Project sponsor shall prepare a National Oceanic and Atmospheric (NOAA)-approved sound attenuation monitoring plan to protect fish and marine mammals prior to starting in-water construction that would require pile driving. Given that the Project may impact state listed species and be subject to CDFW's permitting authority, the sound attenuation monitoring plan will also need to be reviewed and approved by CDFW prior to being implemented.

Recommendation: CDFW recommends that the first sentence in Mitigation Measure 3.4-6 be edited to read as follows:

"Prior to the start of any in-water construction that would require pile driving, the Project sponsor shall prepare a NOAA ***and CDFW***-approved sound attenuation monitoring plan to protect fish and marine mammals, and the approved plan shall be implemented during construction."

A-1-5

Comment 6: Temporary Crane Platform

Issue: The DEIR outlines the installation of the piles for the temporary crane platform using a vibratory hammer to install the 12-16 18-inch diameter piles. CDFW is in agreement with the proposed methods for installing piles. However, the DEIR does not describe the framing, decking, or rails that may be associated with the platform. Fish and Game Code states that it is unlawful to deposit into, permit to pass into, or place where it can pass into waters of the state any substance or material deleterious to fish, plant life, or bird life (Fish and G. Code, § 5650(6).) For CDFW to determine if the platform is consistent with Fish and Game Code, the Final EIR (FEIR) should include a detailed discussion on the types of materials that are being considered for construction of the platform.

Recommendation: CDFW recommends the FEIR provide details regarding the rest of the crane platform construction in addition to the support piles. CDFW recommends avoiding the use of treated wood materials in or above the waters of San Francisco Bay. CDFW also recommends that overwater structures use materials that will allow light penetration to the waters of the bay. This can be achieved by spacing deck boards one inch apart or using slated/grated decking made of metal or composite materials.

Additionally, if any of the proposed measures for pile driving, including methods for pile driving or the types of piles, change before Project implementation, CDFW recommends further consultation regarding potential take of state listed species and the potential need for an Incidental Take Permit.

A-1-6

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form, online field survey form, and contact information for CNDDB staff can be found at the following link: https//wildlife.ca.gov/data/CNDDB/submitting-data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

A-1-7

FILING FEES

CDFW anticipates that the Project will have an impact on fish, wildlife, plants, and the habitats on which they depend. An assessment of filing fees is necessary (Fish and G. Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the

Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

A-1-7 cont.

CONCLUSION

Thank you for the opportunity to comment on the Project's DEIR. If you have any questions for staff in the Bay Delta Region, please contact Ms. Tami Schane, Senior Environmental Scientist (Specialist), at (415) 831-4640 or Tami.Schane@wildlife.ca.gov; or Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541 or Brenda.Blinn@wildlife.ca.gov. For questions for staff in Marine Region, please contact Mr. Arn Aarreberg, Environmental Scientist, at (707) 576-2889 or Arn.Aarreberg@wildlife.ca.gov; or Mr. Eric Wilkins, Senior Environmental Scientist (Supervisory), at (805) 594-6172 or Eric.Wilkins@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Stephanie Fong
CF047D7F8D234E1...
Stephanie Fong
Acting Regional Manager
Bay Delta Region

DocuSigned by:
343995CB95354BC...
Craig Shuman
Regional Manager
Marine Region

ec: State Clearinghouse

Tami Schane, CDFW Bay Delta Region
Tami.Schane@wildlife.ca.gov

Brenda Blinn, CDFW Bay Delta Region
Brenda.Blinn@wildlife.ca.gov

Craig Weightman, CDFW Bay Delta Region
Craig.Weightman@wildlife.ca.gov

Arn Aarreberg, CDFW Marine Region
Arn.Aarreberg@wildlife.ca.gov

Eric Wilkins, CDFW Marine Region
Eric.Wilkins@wildlife.ca.gov

Becky Ota, CDFW Marine Region
Becky.Ota@wildlife.ca.gov

Anniken Lydon, Bay Conservation Development Commission
Anniken.Lydon@bcdc.ca.gov

Schuyler Olsson, Bay Conservation Development Commission
Schuyler.Olsson@bcdc.ca.gov

Agnes Farres, SF Bay Regional Water Quality Control Board
Agnes.Farres@waterboards.ca.gov

Alison Weber-Stover, NOAA Fisheries
Alison.Weber-stover@noaa.gov

Frances Malamud-Roam, U.S. Army Corps of Engineers
Frances.P.Malamud-Roam@usace.army.mil

Valary Bloom, U.S. Fish and Wildlife Service
Valary_Bloom@fws.gov

REFERENCES

USBR, USFWS, and CDFW 2013. Suisun Marsh Habitat Management, Preservation, and Restoration Plan. May 2013. Available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=17283.

USFWS 2015. California Clapper Rail Survey Protocol. San Francisco Bay-Delta Fish and Wildlife Office. Available at: https://www.fws.gov/sfbaydelta/documents/June_2015__Final_CCR_protocol.pdf.

3.2 Response to Comments from California Department of Fish and Wildlife; Stephanie Fong, Acting Regional Manager, Bay Delta Region; and Craig Shuman, Regional Manager, Marin Region (October 22, 2021) (Comment Letter A-1)

A-1-1 This comment is preceded by an overview of CDFW's responsibilities, and a summary of the Project Description and Biological Resources setting consistent with the EIR. This comment indicates that a Lake and Streambed Alteration Agreement may be required from CDFW for project activities affecting rivers, lakes, or streams, and notably for this project, San Rafael Creek. This comment is noted. Further, EIR Table 2-1 lists anticipated regulatory requirements for this project and acknowledges the potential requirement for a Lake and Streambed Alteration Agreement.

A-1-2 This comment requests that Mitigation Measure 3.4-1 include a condition that the lead biologist for Project-related monitoring and training activities be approved by CDFW prior to being assigned for mitigation implementation. This request is acknowledged, and it is expected that requirement would be incorporated into regulatory permit conditions of approval. However, CDFW approval of assigned lead biologist staff is not required to reduce a significant impact to special-status and common migratory birds and raptors under CEQA.

A-1-3 This comment requests that Mitigation Measure 3.4-2 be revised to expand the construction buffer for consistency with the Suisun Marsh Habitat Management, Preservation, and Restoration Plan. The comment also requests clarification that the qualified biologist would have authority to stop work if they determine that Project activities have caused any rails to vocalize or flush regardless of distance of the rails from the work activities, and that rail breeding survey protocols should follow the June 2015 *California Clapper Rail Survey Protocols* rather than the 2017 *Site-Specific Protocol for Monitoring Marsh Birds* developed by the Don Edwards San Francisco Bay and San Pablo Bay National Wildlife Refuges. It is noted that the Project area does not fall within Suisun Marsh area and is not governed by this plan and that Mitigation Measure 3.4-2 acknowledges that the buffer may vary based on coordination with regulating agencies. This coordination would occur during the regulatory permitting process, which would follow completion of CEQA. However, Mitigation Measure 3.4-2 has been revised:

Mitigation Measure 3.4-2: Avoid and Minimize Impacts on California Black Rail and California Ridgway's Rail

- To minimize or avoid the loss of individual California black rail and California Ridgway's 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 based on site specific conditions, 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.

  Survey methods for rails shall follow the *Site-Specific Protocol for Monitoring Marsh Birds*, which was developed for use by USFWS and partners to improve bay-wide monitoring accuracy by standardizing surveys and increasing the ability to share data (Wood et al. 2017). Surveys are concentrated during the approximate period of peak detectability, January 15 to March 25, and are structured to efficiently sample an area in three rounds of surveys by broadcasting calls of target species during specific periods of each survey round. Call broadcasts increase the probability of detection compared to passive surveys when no call broadcasting is employed. This protocol has since been adopted by the Invasive Spartina Project (ISP) and Point Blue Conservation Science to survey California Ridgway's rails at sites throughout San Francisco Bay Estuary, including at Tiscornia Marsh. The survey results and protocols from the ISP shall be used, or a survey protocol developed in coordination with CDFW and USFWS incorporating both species simultaneously and with the same level of effort as protocols currently in use by ISP shall be used. The survey protocol for California Ridgway's rail is summarized below.

  – Previously used survey locations (points) should be used when available to maintain consistency with past survey results. Adjacent points should be at least 200 meters apart along transects in or adjacent to areas representative of the marsh. Points should be located to minimize disturbances to marsh vegetation. Up to eight points can be located on a transect.

  – At each transect, three surveys (rounds) are to be conducted, with the first round of surveys initiated between January 15 and February 6, the second round performed February 7 to February 28, and the third round March 1 to March 25. Surveys should be spaced at least 1 week apart, and the period between March 25 to April 15 can be used to complete surveys delayed by logistical or weather issues. A FESA Section 10(a)(1)(A) permit is required to conduct active surveys.

  – Each point on a transect shall be surveyed for 10 minutes each round. A recording of calls available from the USFWS is broadcast at each point. The recording consists of 5 minutes of silence, followed by a 30-second recording of California Ridgway's rail vocalizations, followed by 30 seconds of silence, followed by a 30-second recording of California black rail, followed by 3.5 minutes of silence.

- 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), or a distance determined in coordination with the USFWS or CDFW based on site specific conditions, then Project activities may proceed at that location.

- If protocol surveys determine that breeding California black rail and/or California Ridgway's rail are present in the project area, the following measures would apply to Project activities conducted during their breeding season (February 1-August 31):
  - Construction activities would not occur within 500 feet of a detected Ridgway's rail or black rail call center.
  - A USFWS- and CDFW-approved biologist shall be on site during construction activities occurring within 50 feet ~~500 feet (150 meters)~~ of any other suitable rail breeding habitat.
  - All other biologists that may need to access the tidal marsh outside of the active construction period or be on site during construction for activities beyond 50~~0~~ feet from suitable rail breeding habitat and 500 feet from rail call centers, shall be trained in black rail and Ridgway's rail biology, identification, and vocalizations, and shall be familiar with both species of rail and their nests.
  - The qualified biologist/biological monitor shall have the authority to stop all work if a Ridgway's rail or black rail enters or is discovered within 50 feet of the active work zone. All nearby work shall halt and not continue until the Ridgway's rail or black rail leaves the area on its own accord or until approving agencies have been consulted. The no work zone shall be large enough as determined by the qualified biologist/biological monitor in order to avoid impacts to all special-status species. If a California black rail or California Ridgway's rail vocalizes or flushes ~~within 10 meters~~, it is possible that a nest or young are nearby. If an alarmed bird or nest is detected, work shall be stopped, and workers shall leave the immediate area carefully and quickly. An alternate route shall be selected that avoids this area, and the location of the sighting shall be recorded to inform future activities in the area.
  - All construction crews working in the marsh during rail breeding season shall be trained and supervised by a USFWS- and CDFW-approved rail biologist.
  - If any activities shall be conducted during the rail breeding season in California black rail or California Ridgway's rail-occupied marshes, biologists shall have maps or global positioning system (GPS) locations of the most current occurrences on the site.

A-1-4 This comment notes that mechanized hand tools may cause mortality and/or injury to salt-marsh harvest mice during vegetation removal and recommends that non-mechanized hand tool be used to the maximum extent practicable. The Mitigation Measure specifically states, "utilizing mechanized hand tools or by another method approved by the USFWS and CDFW". This existing language allows for the use of non-mechanized tools.

This comment further notes that qualified biologists may not be able to survey fast enough to effectively inspect vegetation clearing if largely outnumbered by workers removing vegetation and recommends a 3:1 ratio of vegetation removal workers to qualified biologist/monitors. Given that these species can occur in a variety of habitat

types and vegetation densities, a standardized ratio may not be appropriate. However, Mitigation Measure 3.4-4 has been revised:

Mitigation Measure 3.4-4: Avoid and Minimize Impacts on Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew

- 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 USFWS- and CDFW-approved biologist(s). The number of biologists needed to effectively inspect vegetational removal for the presence of mice and nests depends on the site characteristics and vegetation removal methods and may be determined in coordination with approving agencies.

- To protect salt marsh harvest mouse from construction-related traffic, access roads, haul routes, and staging areas within 50 feet of salt marsh harvest mouse habitat shall be bordered by temporary exclusion fencing; or other wildlife exclusion fencing as specified in federal or state permits. The fence should be made of a material that does not allow salt marsh harvest mouse to climb or pass through, of a minimum above-ground height of 30 inches, and the bottom should be buried to a depth of at least 6 inches so that mice cannot crawl under the fence. Any supports for the salt marsh harvest mouse exclusion fencing (e.g., t-posts) shall be placed on the side of the fence facing the interior of the Project site. The last 5 feet of the fence shall be angled away from the road to direct wildlife away from the road. A USFWS- and CDFW-approved biologist with previous salt marsh harvest mouse experience shall be on site during fence installation and shall check the fence alignment prior to vegetation clearing and fence installation to ensure that no salt marsh harvest mice are present.

- 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, or other method approved by the USFWS and CDFW following vegetation removal (see 2nd bullet, above).

- 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 within 2 hours before and after 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.
- A USFWS- and CDFW-approved biologist with previous salt marsh harvest mouse monitoring and/or surveying experience shall be on site during construction activities occurring in suitable habitat. The USFWS- and CDFW-approved biologist has the authority to stop Project activities if any of the requirements associated with these measures are not being fulfilled. If a harvest mouse is observed in the work area, construction activities shall cease in the immediate vicinity of the potential salt marsh harvest mouse. The individual shall be allowed to leave the area before work is resumed. If the individual does not move on its own volition, the USFWS-approved biologist would contact USFWS (and CDFW if appropriate) for further guidance on how to proceed.
- If the USFWS- and CDFW-approved 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.

A-1-5 This comment requests that CDFW approve, in addition to NOAA, a sound attenuation monitoring plan to protect fish and marine mammals. Based on this comment, Mitigation Measure 3.4-6 has been revised:

Mitigation Measure 3.4-6: Fish and Marine Mammal Protection During Pile Driving

Prior to the start of any in-water construction that would require pile driving, the Project sponsor shall prepare a NOAA and CDFW-approved sound attenuation monitoring plan to protect fish and marine mammals, and the approved plan shall be implemented during construction. This plan shall provide detail on the sound attenuation system, detail methods used to monitor and verify sound levels during pile driving activities (if required based on projected in-water noise levels), and describe methods to reduce impact pile-driving in the aquatic environment to an intensity level less than 120 dB (RMS) continuous noise level for marine mammals at a distance of 1,640 feet. The plan shall incorporate, but not be limited to, the following elements:

- 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.
- To the extent feasible, vibratory pile drivers shall be used for the installation of all support piles. Vibratory pile driving shall be conducted following the USACE "Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California." The USFWS and NMFS completed Section 7 consultation on this document, which establishes

general procedures for minimizing impacts on natural resources associated with projects in or adjacent to jurisdictional waters.

- If NOAA sound level criteria for marine mammals are exceeded during vibratory hammer pile installation, a NOAA-approved biological monitor shall be available to conduct surveys before and during pile driving to inspect the work zone and adjacent waters for marine mammals. The monitor shall be present as specified by NMFS during impact pile driving and ensure that:
  - The safety zones established in the sound monitoring plan for the protection of marine mammals are maintained.
  - Work activities are halted when a marine mammal enters a safety zone and resumed only after the animal has left the area or has not been observed for a minimum of 15 minutes.

A-1-6 This comment requests additional design information regarding the proposed crane platform materials. The exact framing and decking materials to be used for the proposed platform are not known at this time, and would be selected by the Project contractor should the Project be approved, and would be based in part on materials available at the time of construction. As discussed in EIR Appendix B, Section B.6, Hazards and Hazardous Materials, construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials (including potential release of crane platform construction materials), and, therefore, the impact would be less than significant. However, in response to Comment A-1-6, EIR page 2-15, paragraph 6 has been revised:

Temporary Crane Platform

A temporary crane platform would be installed along San Rafael Creek near the northeast corner of the Project site to unload materials and equipment brought in via barge. The platform would be a pile-supported steel and <u>untreated</u> timber deck, <u>with gaps between deck plank materials that allow for light penetration. The platform would be</u> approximately 30 square feet in size. The platform would be supported by 12 to 16 steel piles, approximately 18 inches in diameter and driven 60 to 70 feet deep using a vibratory hammer. The platform would remain in place for 1 to 3 years while the coarse beach and eroded marsh area are being constructed. Following construction, the platform would be completely removed and transported off site.

A-1-7 The comment requesting that survey information related to special-status species occurrences be reported to the California Natural Diversity Database, and that the Project would be subject to CDFW filing fees is noted. While EIR Section 3.4, Biological Resources, notes the potential for a number of special-status species to be present within the Project area, none were observed during surveys conducted for the Project. Regarding filing fees, should the EIR be certified, the required filing fees will be submitted with the CEQA Notice of Completion.

This page intentionally left blank

Email

From: Eva Calderon <evacalderon12@icloud.com>
Sent: Monday, October 25, 2021 4:01 PM
To: Theo Sanchez
Subject: Buenas tardes está muy Bin el prollecto es para el Bin de la comunidad de canal

Enviado desde mi iPhone

Translation: Good Afternoon, the project is great since it will benefit the Canal Community. I-1-1

3.3 Response to Comments from Eva Calderon (October 25, 2021) (Comment Letter I-1)

I-1-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Anna Costello <annanna.cost@gmail.com>
Sent: Monday, October 18, 2021 11:38 AM
To: Theo Sanchez
Subject: Support the Tiscornia Marsh Project!

Dear Mr. Sanchez,

As a resident of San Rafael, I have seen firsthand how vulnerable the Canal community is to flooding and the hazardous weather conditions that climate change will continue to exacerbate. I wanted to express my full support for the Tiscornia Marsh Project which will both support the ecological well-being of the Tiscornia Marsh as well as protect the residents of the community with increased flood protection. This project is **vital** to proactively protect the community from flood damage and emergency scenarios. Please do all in your power to support the Tiscornia Marsh Project and the Canal community who is very vulnerable and requires our resources and attention now! Marin County values ecological sustainability highly and this project will be highly favorable to the wider Marin community. I-2-1

The Canal residents are some of the most vulnerable communities to flooding, sea level rise, and climate change impacts in our county. Please support the Tiscornia Marsh Project to take proactive action to support the ecology and local community. Thank you for your attention and support!

Best,
Anna

3.4 Response to Comments from Anna Costello (October 18, 2021) (Comment Letter I-2)

I-2-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Kristi Denham <revkristi@aol.com>
Sent: Monday, October 18, 2021 10:51 AM
To: Theo Sanchez
Subject: Tiscornia Marsh Project

Dear Mr. Sanchez,
My family are long time residents of Marin. We support the efforts of the Tiscornia Marsh Project to protect the Canal Community from flooding due to rising sea levels. Please do all that you can to ensure that this project goes through. It is past time for us to address the dangers of sea level rise and its impact on our most vulnerable communities who always seem to be too easily forgotten, especially when the short term price is high and the wealthier communities around us don't see it as a problem they will face. Please. Do the right thing and support this important work.
Thank you in advance.
Sincerely,
Rev. Kristi Denham

I-3-1

3.5 Response to Comments from Kristi Denham (October 18, 2021) (Comment Letter I-3)

I-3-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: LORI JOHNSON <winker79@sbcglobal.net>
Sent: Monday, October 18, 2021 11:25 AM
To: Theo Sanchez
Subject: Tiscornia Project

Dear Mr. Sanchez,

I am a resident of Marin County and I am writing to support the efforts of the Tiscornia Marsh Project to protect the Canal Community from flooding due to rising sea levels.
It's no coincidence that the land most vulnerable to sea level rise in Marin is also the home to one of the most vulnerable communities of color in the state. We need to let the politicians know that we demand funding for projects like this that will protect these communities from environmental catastrophe and enhance the sustainability of the Bay at the same time.

I-4-1

Sincerely,
Lori Johnson

3.6 Response to Comments from Lori Johnson (October 18, 2021) (Comment Letter I-4)

I-4-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Jonathan Knight <knight.jonathan@gmail.com>
Sent: Monday, October 18, 2021 12:24 PM
To: Theo Sanchez
Subject: I support the Tiscornia Marsh Project

Hello Mr. Sanchez,
I am writing as a Marin resident concerned both about environmental disaster and racial equity. The Canal District of San Rafeal is a valued part of the Marin community and we need to come together to protect it. The Canal is one of the most vulnerable communities to flooding and our most economic and racially vulnerable at the same time. This is very often a combination that leads to devastation for families. I fully support funding the Tiscornia Marsh Project and doing everything we can to protect our vulnerable communities.

I-5-1

Thank You,

--

Jonathan Knight
157 Meadowcroft Dr.
San Anselmo, CA 94960

3.7 Response to Comments from Jonathan Knight (October 18, 2021) (Comment Letter I-5)

I-5-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: jess lerner <jesslerner8@gmail.com>
Sent: Monday, October 18, 2021 11:29 AM
To: Theo Sanchez
Subject: Feedback re: Tiscornia Marsh Project

Dear Mr. Sanchez,
Please put these comments on record and share with relevant City Council members and officials.

Selected properties along the Canal shoreline are at high risk of coastal flooding due to sea-level rise and climate change, bay waves and tides are increasing in volume. Because the water level is increasing, severe flooding is likely to happen within 5 to 10 years, rather than 100 years as previously predicted.

The land most vulnerable to sea level rise in Marin is also the home to one of the most vulnerable communities of color in the county.

The goal of the Tiscornia Marsh project is to enhance the ecological function of the Tiscornia Marsh property and increase flood protection for the Canal neighborhood, while maintaining the community value of the Albert J. Boro Community Center and Pickleweed Park.

We need funding for projects like this that will protect these most vulnerable communities from environmental catastrophe, and enhance the sustainability of the Bay at the same time.

Please protect these communities, protect our ecological integrity, and do the work needed to face imminent risk from climate change and sea level rise now, and support the Tiscornia Marsh Project.

I-6-1

Thank you for sharing these comments!

Jess Lerner
Fairfax

3.8 Response to Comments from Jess Lerner (October 18, 2021) (Comment Letter I-6)

I-6-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Taylor Renee <taylorreneebirth@gmail.com>
Sent: Monday, October 18, 2021 11:29 AM
To: Theo Sanchez
Subject: Tiscornia Marsh Project

Dear Mr. Sanchez,

As a resident of San Rafael, I support the efforts of the Tiscornia Marsh Project to protect the Canal Community from flooding due to rising sea levels. This community is one of the most vulnerable populations and I believe it is critical to protect them by supporting this project. We will do whatever is necessary to protect the Canal District residents' homes because this community is valued as a major part of San Rafael and Marin County in general. Thank you for your consideration. I-7-1

Sincerely,
--
Taylor Newcomb
Birth Doula
(949) 390-3434
www.taylorreneebirth.com

3.9 Response to Comments from Taylor Newcomb (October 18, 2021) (Comment Letter I-7)

I-7-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Marina Palma <marinapalma123@gmail.com>
Sent: Monday, October 25, 2021 2:54 PM
To: Theo Sanchez
Subject: Proyecto Tiscornia March

Estimado Theo Sanchez,
Mi nombre es Marina Palma, soy una de las Lideres comunitarias con Voces Del Canal.
Nuestra comunidad es una comunidad de gente trabajadora, trabajadores esenciales y con un gran número de estudiantes que asisten al Distrito escolar de San Rafael. Necesitamos vivir en un lugar seguro. Entre los muchos desafíos de seguridad que enfrentamos. El de inundación es el más grave porque nos desintegraríamos. YO APOYO EL PROYECTO TISCORNIA MARCH. Por favor ayúdenos a mantener nuestra comunidad unida y segura.
En lo que Voces Del Canal pueda asistir, cuente con nosotros.
Con respeto,
Marina Palma
(Necesitamos tabiques a lo largo de la costa)

I-8-1

Sent from my iPhone

Dear Theo Sanchez,

My name is Marina Palma and I'm one of the community leaders with Voces Del Canal (Voices of the Canal). Our community is a community with hard-working people, essential workers, and a large number of students who attend San Rafael's School District. We need a safe place to live. With the number of safety challenges we face, the most challenging one is flooding because we get separated from one another. I SUPPORT THE TISCORNIA MARCH PROJECT. Please help us maintain our community united and safe. In any way Voces Del Canal can be of support, you can all count on us.

With all due respect,
Marina Palma

(We need a wall (or a border protection) up along the coast)

3.10 Response to Comments from Marina Palma (October 25, 2021) (Comment Letter I-8)

I-8-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Cristina Rosales <cris_Rosales83@hotmail.com>
Sent: Monday, October 25, 2021 3:19 PM
To: Theo Sanchez
Subject: Yo apoyo el proyecto para protejer alas familias de la comunidad

Enviado desde mi iPhone

From subject line: I support the project to be able to protect the families of the community. I-9-1

3.11 Response to Comments from Cristina Rosales (October 25, 2021) (Comment Letter I-9)

I-9-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Darlin Ruiz <darlinruiz0629@icloud.com>
Sent: Monday, October 25, 2021 2:55 PM
To: Theo Sanchez
Subject: Inundación

Hola buenas tardes! mi nombre es Darlin Ruiz Soy residente de el Canal y miembro del grupo Voces de Canal.
Estoy preocupada por el asunto de las inundaciones de nuestro vecindario, se que esto puede pasar en cualquier momento, me encantaría que la Ciudad apruebe este proyecto. Y mi pregunta es que debo hacer en caso de inundación? Cuales son los pasos a seguir?
Y cómo puedo yo apoyar a este proyecto?

I-10-1

Enviado desde mi iPhone

Translation: Hello, good afternoon! My name is Darlin Ruiz. I am a resident of the Canal and a member of Voces del Canal (Voices of the Canal). I am worried about the future flooding in our neighborhoods and I know that it can happen at any moment. I would love it if the city approved this project. My questions are:
What should I do in the case there is flooding? What are the steps I should take? How can I support this project?

3.12 Response to Comments from Darlin Ruiz (October 25, 2021) (Comment Letter I-10)

I-10-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Blanca Salinas <blancaledesma1977@gmail.com>
Sent: Monday, October 25, 2021 3:03 PM
To: Theo Sanchez

Hola quiero commentar
Hacerca de la tormenta de Ayer que fui afectada Como vivo en El nivel de la Calle se me inundo mi apartments. Y es importante poner atencion AL cambio climatic y tener medidas de seguridad Para mi Comunidad de canal. Grasias, Blanca Salinas.

I-11-1

Hello, I would like to comment.

With the storm that occurred yesterday, I was affected by the flooding as my apartment is leveled with the street. It is important to pay attention to the climate changes and take measures to ensure the safety of my community (the Canal).

Thank you,
Blanca Salinas

3.13 Response to Comments from Blanca Salinas (October 25, 2021) (Comment Letter I-11)

I-11-1 Your comment for the Project has been included as part of the public record. The goals and objectives found in the Project Description provide more information regarding how the Project will impact flooding in the surrounding area.

Email

From: Aure <avmaure@gmail.com>
Sent: Monday, October 25, 2021 2:35 PM
To: Theo Sanchez
Subject: Voto

Buenas Tardes , Mi nombre es Aurelia Vargas , Soy Residente del Canal y Voluntaria de Voces del Canal, y yo Voto a favor del Proyecto Tiscornia, Esto ayudaría a proteger a la Comunidad del Canal, y seria genial que el proyecto fuera pronto.Gracias. I-12-1

Enviado desde mi iPhone

Good afternoon, my name is Aurelia Vargas. I am a resident of the Canal and a volunteer for Voces del Canal (Voices of the Canal). I vote in favor of Project Tiscornia. This project would help protect the Canal Community and it would be ideal if the project occurred quickly. Thank you.

3.14 Response to Comments from Aurelia Vargas (October 25, 2021) (Comment Letter I-12)

I-12-1 Your support of the Project has been included as part of the public record. This comment does not raise a concern that relates to physical impacts of the Project or to any environmental issue related to the Project.

Email

From: Warren Weisenburg <a7ewizard@gmail.com>
Sent: Tuesday, October 26, 2021 1:11 PM
To: Theo Sanchez
Subject: Tiscornia Marsh Restoration Project DEIR

Dear Mr. Sanchez and City of San Rafael,

I have reviewed the DEIR for this project and would like to make a few comments for the record.

I am a long time resident of the Canal having moved here in 1960. I remember this area before Pickleweed Park, Spinnaker, and Baypoint existed. The Park and these developments are built on dredge spoils.
Back in the day, suction dredges pumped their spoils over the existing levees.

My first comment has to do with the "Diked Marsh" restoration plan.
This area is dried dredge spoils that have evolved over 40 or 50 years into the pickleweed, oak and scrub habitat that we see today. The plan is to lower the levee and add tidal channels to turn this area into a tidal marsh. My concern is the re-introduction of tidal flow will cause liquefaction of this sediment. Tidal action will cause erosion and carry out of this material resulting in sediment deposit into the San Rafael Creek navigable waters.
I believe this possibility needs to be examined in greater detail and the "Diked Marsh" conversion idea scrapped if warranted. I-13-1

Secondly, this project does absolutely nothing to lessen the flooding prospects of the Canal area. The DEIR states in numerous places the flood protection is inconsistent along the entire length of the Creek.
The stated goal and objective of " Increase the level of flood protection for the Canal neighborhood and other nearby communities of central San Rafael." is without merit. Flood protection should not be a consideration with regard to this project. I-13-2

Finally, I am mostly in favor of this Project. Marsh restoration is a worthy pursuit. I would like to see the stipulation that only dredge material from the Creek be used for this project. I-13-3

Sincerely,
Warren Weisenburg
29 Sorrento Way
415-215-4666

3.15 Response to Comments from Warren Weisenburg (October 26, 2021) (Comment Letter I-13)

I-13-1 The commenter expresses concern that the re-introduction of tidal flow may cause liquefaction and/or erosion of sediments in the diked marsh.

Soil liquefaction is the phenomenon in which a loose to medium dense saturated granular soil undergoes reduction of internal strength as a result of increased pore water pressure generated by shear strains within the soil mass. This behavior is most commonly induced by strong ground shaking associated with earthquakes.

The potential for liquefaction and/or loss of strength at the project site is low because the bay muds at the site do not have a high sand content. In addition, as discussed in EIR Chapter 2.0, Project Description, the existing levees would be rehabilitated to USACE levee standards all the way down to their base elevations. The levees would be constructed using properly compact material and to a high enough elevation to accommodate settlement and still be high enough to prevent overtopping and erosion. For these reasons and as discussed in EIR Appendix B, Section B.5, Geology and Soils, a.iii, during the operational phase, the Project would not change the risk of liquefaction or ground failure from existing conditions, which include the same structure types. Therefore, impacts relative to seismic-induced ground failure such as liquefaction would be less than significant.

Erosion of the sediments within the diked marsh once tidal action is not expected to be significant becausethe diked marsh has natural erosion protection due to its cohesive soils (fat clays per Hultgren-Tillis Engineers) and vegetated cover (mostly pickleweed). In addition, daily tidal action that fills and empties the marsh occurs slowly. This has low erosive energy would not be expected to result in erosion. Therefore significant erosion of the new tidal channels is not expected.

In response to this comment, and as staff-initiated text changes, EIR Appendix B, Topics Not Requiring Detailed Analysis, page B-15, paragraph 1 and page B-17, paragraph 1 have been revised:

> Liquefaction is a phenomenon where saturated subsurface soils lose strength because of increased pore pressure and exhibit properties of a liquid rather than those of a solid. In general, the soils most susceptible to liquefaction are clean, loose, uniformly graded, saturated and fine-grained, and occur close to the ground surface, usually at depths of less than 50 feet. Liquefaction risk maps show that soils in the Project site have a moderate risk for liquefaction, with a very small amount of very high susceptibility soils on the southwest edges of the Project site, primarily where the ecotone slope would be (MTC and ABAG 2006). <u>However, based on site-specific geotechnical investigations, the potential for liquefaction and/or loss of strength at the project site is low because the bay muds at the site do not have a high sand content (Hultgren-Tillis Engineers 2021).</u>

Once constructed, the restored wetland habitats would be largely self-maintaining after the initial period of vegetation establishment. As described in EIR Section 2.4, *Operations and Maintenance*, maintenance for the tidal marsh, ecotone slope, and coarse beach during the 3- to 5-year establishment period would include the removal of invasive plants using localized herbicides or mechanical means, and temporary irrigation of ecotone slope plantings. In addition, the new and improved flood protection levees and trails would require periodic inspection to identify maintenance and adaptive management needs. Physical and biological monitoring would be conducted at Project completion and at 1, 3, 5, and 10 years post-construction. At a minimum, levees would be inspected annually to identify any localized settlement, rodent holes, or other conditions that could compromise the levee integrity. Further, erosion of the sediments within the diked marsh once tidal action is not expected to be significant because the diked marsh has natural erosion protection due to its cohesive soils (fat clays per Hultgren-Tillis Engineers, 2021) and vegetated cover (mostly pickleweed). In addition, daily tidal action that fills and empties the marsh occurs slowly. This has low erosive energy would not be expected to result in erosion. Therefore, significant erosion of the new tidal channels is not expected. With compliance with existing regulations and implementation of the adaptive management activities, impacts associated with erosion would be **less than significant.**

I-13-2 The commenters opinion that flood protection should not be a consideration of the Project and that the Project does not lessen the flooding potential of the Canal area is noted. However, the commenter does not provide information to support the opinion that the Project would not lessen flooding potential of the Canal area; and does not raise a question regarding the adequacy of the EIR analysis. As discussed in EIR Section 2.1.2, Project Background, the low-lying Canal neighborhood adjacent to Tiscornia Marsh is currently at risk to coastal flooding, as is a significant extent of central San Rafael that occupies what was once tidal marshlands and open bay. The area is currently in the Federal Emergency Management Agency (FEMA) 100-year floodplain[1] and will be increasingly susceptible to flood hazards as sea level rises. Much of the Canal neighborhood lies below high tide elevations, requiring pump stations to remove stormwater and shoreline levees to protect against coastal flooding. The reach of San Rafael Creek shoreline upstream of the Project site is vulnerable to flooding, as many buildings have encroached on the shoreline edge and there is no formal flood protection system.

The roughly 2,300 feet of shoreline levee on the Project site is an un-accredited earthen berm, which varies in height and does not meet the FEMA freeboard requirements, with much of its length below the required elevation of the 100-year base flood

[1] A 100-year flood is a flood event with a magnitude that has a 1 in 100 chance (1 percent probability) of occurring in any given year. The 100-year floodplain therefore encompasses lands with a 1 percent annual chance of such flooding.

elevation (BFE)[2] plus 3 feet of freeboard. A segment of the levee on the southern end of the Project site, near the former Schoen Park, is even lower, below the 100-year BFE level. Portions of the shoreline levee segment on the Tiscornia Marsh and Pickleweed Park properties are therefore at risk of overtopping during an extreme coastal flood event, resulting in flooding of low-lying portions of the adjacent Canal neighborhood.

As discussed in EIR Section 2.2.4, Shoreline Levee Improvements, levee improvements were designed to approximately 13 feet above sea level, providing 3 feet of freeboard above FEMA's current 100-year BFE for the Project area of 10 feet (FEMA 2021). This would require raising the existing levees 1-4 feet, depending on their current height (e.g., the existing levee on the west side of the Project site would be raised by 4 feet, while the levee on the east side of the soccer field would only be raised by 1 foot). This design elevation considers an approximate 50-year timeline for the Project, and anticipated sea level rise to roughly 2070 under a medium–high risk aversion scenario as defined by the state's sea level rise planning guidance. The medium–high risk aversion scenario equates to a one in 200 chance that sea level rise would meet or exceed the probability projections of 2.4 to 2.6 feet for 2060 or 3.1 to 3.5 feet by 2070.

Therefore, the project would directly reduce the potential for overtopping of the shoreline levee at the Project site and contribute to lessening the flooding potential of the Canal area.

I-13-3 This is not a specific comment about the adequacy of the EIR but rather expresses an opinion that dredge material for the Project be limited to San Rafael Creek materials. EIR page 2-20 discusses the dredged material sources, containment, and placement and notes San Rafael Creek as a potential source of dredge material. The EIR notes that the City is currently partnering with the USACE on dredging the navigation canal of San Rafael Creek. If the timing aligns, canal dredging would provide sufficient dredged material for the Proposed Project.

[2] The 100-year base flood elevation is defined by FEMA as the computed elevation to which the 100-year flood, or 1 percent annual chance flood, is anticipated to rise.

CHAPTER 4
EIR Text Revisions

The following changes to the text of the Draft Environmental Impact Report (EIR) are made as a staff-initiated text change, in response to comments on the Draft EIR, or are included to clarify the Draft EIR text. For each change, new language is underlined, while deleted text is shown in ~~strikethough~~.

4.1 Project Description

EIR Page 2-15, paragraph 6 has been revised in response to Comment A-1-6:

> ***Temporary Crane Platform***
>
> A temporary crane platform would be installed along San Rafael Creek near the northeast corner of the Project site to unload materials and equipment brought in via barge. The platform would be a pile-supported steel and untreated timber deck, with gaps between deck plank materials that allow for light penetration. The platform would be approximately 30 square feet in size. The platform would be supported by 12 to 16 steel piles, approximately 18 inches in diameter and driven 60 to 70 feet deep using a vibratory hammer. The platform would remain in place for 1 to 3 years while the coarse beach and eroded marsh area are being constructed. Following construction, the platform would be completely removed and transported off site.

4.2 Biological Resources

EIR Page 3.4-30, Mitigation Measure 3.4-2 has been revised in response to Comment A-1-3:

> **Mitigation Measure 3.4-2: Avoid and Minimize Impacts on California Black Rail and California Ridgway's Rail**
>
> - To minimize or avoid the loss of individual California black rail and California Ridgway's 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 based on site specific conditions, 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.

Survey methods for rails shall follow the *Site-Specific Protocol for Monitoring Marsh Birds*, which was developed for use by USFWS and partners to improve bay-wide monitoring accuracy by standardizing surveys and increasing the ability to share data (Wood et al. 2017). Surveys are concentrated during the approximate period of peak detectability, January 15 to March 25, and are structured to efficiently sample an area in three rounds of surveys by broadcasting calls of target species during specific periods of each survey round. Call broadcasts increase the probability of detection compared to passive surveys when no call broadcasting is employed. This protocol has since been adopted by the Invasive Spartina Project (ISP) and Point Blue Conservation Science to survey California Ridgway's rails at sites throughout San Francisco Bay Estuary, including at Tiscornia Marsh. The survey results and protocols from the ISP shall be used, or a survey protocol developed in coordination with CDFW and USFWS incorporating both species simultaneously and with the same level of effort as protocols currently in use by ISP shall be used. The survey protocol for California Ridgway's rail is summarized below.

- Previously used survey locations (points) should be used when available to maintain consistency with past survey results. Adjacent points should be at least 200 meters apart along transects in or adjacent to areas representative of the marsh. Points should be located to minimize disturbances to marsh vegetation. Up to eight points can be located on a transect.
- At each transect, three surveys (rounds) are to be conducted, with the first round of surveys initiated between January 15 and February 6, the second round performed February 7 to February 28, and the third round March 1 to March 25. Surveys should be spaced at least 1 week apart, and the period between March 25 to April 15 can be used to complete surveys delayed by logistical or weather issues. A FESA Section 10(a)(1)(A) permit is required to conduct active surveys.
- Each point on a transect shall be surveyed for 10 minutes each round. A recording of calls available from the USFWS is broadcast at each point. The recording consists of 5 minutes of silence, followed by a 30-second recording of California Ridgway's rail vocalizations, followed by 30 seconds of silence, followed by a 30-second recording of California black rail, followed by 3.5 minutes of silence.

- 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), or a distance determined in coordination with the USFWS or CDFW based on site specific conditions, then Project activities may proceed at that location.
- If protocol surveys determine that breeding California black rail and/or California Ridgway's rail are present in the project area, the following measures would apply to Project activities conducted during their breeding season (February 1-August 31):
  - Construction activities would not occur within 500 feet of a detected Ridgway's rail or black rail call center.

- A USFWS- and CDFW-approved biologist shall be on site during construction activities occurring within 50 feet ~~500 feet (150 meters)~~ of any other suitable rail breeding habitat.
- All other biologists that may need to access the tidal marsh outside of the active construction period or be on site during construction for activities beyond 50~~0~~ feet from suitable rail breeding habitat and 500 feet from rail call centers, shall be trained in black rail and Ridgway's rail biology, identification, and vocalizations, and shall be familiar with both species of rail and their nests.
- The qualified biologist/biological monitor shall have the authority to stop all work if a Ridgway's rail or black rail enters or is discovered within 50 feet of the active work zone. All nearby work shall halt and not continue until the Ridgway's rail or black rail leaves the area on its own accord or until approving agencies have been consulted. The no work zone shall be large enough as determined by the qualified biologist/biological monitor in order to avoid impacts to all special-status species. If a California black rail or California Ridgway's rail vocalizes or flushes ~~within 10 meters~~, it is possible that a nest or young are nearby. If an alarmed bird or nest is detected, work shall be stopped, and workers shall leave the immediate area carefully and quickly. An alternate route shall be selected that avoids this area, and the location of the sighting shall be recorded to inform future activities in the area.
- All construction crews working in the marsh during rail breeding season shall be trained and supervised by a USFWS- and CDFW-approved rail biologist.
- If any activities shall be conducted during the rail breeding season in California black rail or California Ridgway's rail-occupied marshes, biologists shall have maps or global positioning system (GPS) locations of the most current occurrences on the site.

EIR Page 3.4-33, Mitigation Measure 3.4-4 has been revised in response to Comment A-1-4:

Mitigation Measure 3.4-4: Avoid and Minimize Impacts on Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew

- 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 USFWS- and CDFW-approved biologist(s). The number of biologists needed to effectively inspect vegetational removal for the presence of mice and nests depends on the site characteristics and vegetation removal methods and may be determined in coordination with approving agencies.

- To protect salt marsh harvest mouse from construction-related traffic, access roads, haul routes, and staging areas within 50 feet of salt marsh harvest mouse habitat shall be bordered by temporary exclusion fencing; or other wildlife exclusion fencing as specified in federal or state permits. The fence should be made of a material that does not allow salt marsh harvest mouse to climb or pass through, of a minimum above-ground height of 30 inches, and the bottom should be buried to a depth of at least 6 inches so that mice cannot crawl under the fence. Any supports for the salt marsh harvest mouse exclusion fencing (e.g., t-posts) shall be placed on the side of the fence facing the interior of the Project site. The last 5 feet of the fence shall be angled away from the road to direct wildlife away from the road. A USFWS- and CDFW-approved biologist with previous salt marsh harvest mouse experience shall be on site during fence installation and shall check the fence alignment prior to vegetation clearing and fence installation to ensure that no salt marsh harvest mice are present.
- 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, or other method approved by the USFWS and CDFW following vegetation removal (see 2nd bullet, above).
- 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 within 2 hours before and after 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.
- A USFWS- and CDFW-approved biologist with previous salt marsh harvest mouse monitoring and/or surveying experience shall be on site during construction activities occurring in suitable habitat. The USFWS- and CDFW-approved biologist has the authority to stop Project activities if any of the requirements associated with these measures are not being fulfilled. If a harvest mouse is observed in the work area, construction activities shall cease in the immediate vicinity of the potential salt marsh harvest mouse. The individual shall be allowed to leave the area before work is resumed. If the individual does not move on its own volition, the USFWS-approved biologist would contact USFWS (and CDFW if appropriate) for further guidance on how to proceed.
- If the USFWS- and CDFW-approved 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.

EIR Page 3.4-41, Mitigation Measure 3.4-6 has been revised in response to Comment A-1-5:

Mitigation Measure 3.4-6: Fish and Marine Mammal Protection During Pile Driving

Prior to the start of any in-water construction that would require pile driving, the Project sponsor shall prepare a NOAA and CDFW-approved sound attenuation monitoring plan to protect fish and marine mammals, and the approved plan shall be implemented during construction. This plan shall provide detail on the sound attenuation system, detail methods used to monitor and verify sound levels during pile driving activities (if required based on projected in-water noise levels), and describe methods to reduce impact pile-driving in the aquatic environment to an intensity level less than 120 dB (RMS) continuous noise level for marine mammals at a distance of 1,640 feet. The plan shall incorporate, but not be limited to, the following elements:

- 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.
- To the extent feasible, vibratory pile drivers shall be used for the installation of all support piles. Vibratory pile driving shall be conducted following the USACE "Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California." The USFWS and NMFS completed Section 7 consultation on this document, which establishes general procedures for minimizing impacts on natural resources associated with projects in or adjacent to jurisdictional waters.
- If NOAA sound level criteria for marine mammals are exceeded during vibratory hammer pile installation, a NOAA-approved biological monitor shall be available to conduct surveys before and during pile driving to inspect the work zone and adjacent waters for marine mammals. The monitor shall be present as specified by NMFS during impact pile driving and ensure that:
  - The safety zones established in the sound monitoring plan for the protection of marine mammals are maintained.
  - Work activities are halted when a marine mammal enters a safety zone and resumed only after the animal has left the area or has not been observed for a minimum of 15 minutes.

4.3 Geology and Soils

EIR Appendix B, Topics Not Requiring Detailed Analysis, page B-15, paragraph 1 has been revised as a staff-initiated text revision and in response to Comment I-13-1:

Liquefaction is a phenomenon where saturated subsurface soils lose strength because of increased pore pressure and exhibit properties of a liquid rather than those of a solid. In

general, the soils most susceptible to liquefaction are clean, loose, uniformly graded, saturated and fine-grained, and occur close to the ground surface, usually at depths of less than 50 feet. Liquefaction risk maps show that soils in the Project site have a moderate risk for liquefaction, with a very small amount of very high susceptibility soils on the southwest edges of the Project site, primarily where the ecotone slope would be (MTC and ABAG 2006). However, based on site-specific geotechnical investigations, the potential for liquefaction and/or loss of strength at the project site is low because the bay muds at the site do not have a high sand content (Hultgren-Tillis Engineers 2021).

EIR Appendix B, Topics Not Requiring Detailed Analysis, page B-17, paragraph 1 has been revised as a staff-initiated text revision and in response to Comment I-13-1:

Once constructed, the restored wetland habitats would be largely self-maintaining after the initial period of vegetation establishment. As described in EIR Section 2.4, *Operations and Maintenance*, maintenance for the tidal marsh, ecotone slope, and coarse beach during the 3- to 5-year establishment period would include the removal of invasive plants using localized herbicides or mechanical means, and temporary irrigation of ecotone slope plantings. In addition, the new and improved flood protection levees and trails would require periodic inspection to identify maintenance and adaptive management needs. Physical and biological monitoring would be conducted at Project completion and at 1, 3, 5, and 10 years post-construction. At a minimum, levees would be inspected annually to identify any localized settlement, rodent holes, or other conditions that could compromise the levee integrity. Further, erosion of the sediments within the diked marsh once tidal action is not expected to be significant because the diked marsh has natural erosion protection due to its cohesive soils (fat clays per Hultgren-Tillis Engineers, 2021) and vegetated cover (mostly pickleweed). In addition, daily tidal action that fills and empties the marsh occurs slowly. This has low erosive energy would not be expected to result in erosion. Therefore, significant erosion of the new tidal channels is not expected. With compliance with existing regulations and implementation of the adaptive management activities, impacts associated with erosion would be **less than significant.**