



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

Bay Delta Region

2825 Cordelia Road, Suite 100
Fairfield, CA 94534

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Marine Region

1933 Cliff Drive, Suite 9
Santa Barbara, CA 93109

www.wildlife.ca.gov

Governor's Office of Planning & Research

Mar 22 2021

STATE CLEARINGHOUSE

March 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 Restoration Project, Notice of Preparation of a 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 Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) for the Tiscornia Marsh Restoration 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 involved in the Project that are within CDFW's area of expertise and relevant to its statutory responsibilities (Fish and Game Code, §1802), and/or which are required to be approved by CDFW (CEQA Guidelines, §§15086, 15096 and 15204).

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, §21000 et seq.) pursuant to CEQA Guidelines §15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) should be obtained pursuant to Fish and Game Code §2081(b) if the Project has the potential to result in

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 2 of 12

take of plants or animals listed under CESA, either during construction or over the life of the Project. Take, as defined by Fish and Game Code §86 is to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”. Issuance of a CESA ITP is subject to CEQA documentation. The CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA §§21001(c), 21083, and CEQA Guidelines §§15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency’s FOC does not eliminate the Project proponent’s obligation to comply with Fish and Game Code §2080.

Lake and Streambed Alteration Agreement

CDFW requires an LSA Notification, pursuant to Fish and Game Code §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. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

Migratory Birds and Raptors

CDFW also has authority over actions that may disturb or destroy active nest sites or take birds without authorization. Fish and Game Code §§3503, 3503.5, and 3513 protect birds, their eggs, and nests. Fully protected bird species may not be taken or possessed at any time, except for necessary scientific research, including efforts for recovery (Fish and Game Code, §3511). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

PROJECT LOCATION

The Project is an approximately 20-acre site consisting of tidal marsh and bay lands located north and outboard of East Canal Street (APN 009-142-01). The marsh/bay lands property is owned by the Marin Audubon Society and is surrounded on the south by a shoreline levee, Schoen Park (small, city-owned park and playground), and Canal

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 3 of 12

Street; on the west by the city-owned Albert J. Boro Community Center and Pickleweed Park; on the east by San Rafael Bay; and on the north by San Rafael Creek.

PROJECT DESCRIPTION

The Project includes restoration of tidal marsh and mudflats north and outboard of Canal Street, as well as restoration of the city-owned diked marsh north of the Community Center and Pickleweed Park playfields. Major elements of the Project include restoring the Tiscornia Marsh site to its former extent by beneficially reusing dredged material from local sources, restoring tidal action to the diked marsh, constructing a coarse beach along the bayward edge of the restored marsh to resist future erosion, constructing a new 600-foot setback levee, development of an ecotone slope, and improving approximately 1,100 feet of shoreline levee to achieve flood protection, public access, and habitat benefits. The overall Project will reconstruct approximately four acres of eroded tidal marsh, preserve and protect approximately eight acres of Tiscornia Marsh, and restore approximately five acres of diked marsh by reconnecting it to tidal inundation.

The CEQA Guidelines (§§15124 and 15378) require that the draft EIR incorporate a full project description, including reasonably foreseeable future phases of the Project, and that contains sufficient information to evaluate and review the Project's environmental impact. Please include a complete description of the following Project components in the Project description: footprint of permanent Project features and temporarily impacted areas, including staging areas and access routes; quantification of any habitat type conversion, such as conversion of tidal mudflat to tidal marsh; encroachment into wetland habitat, mudflat habitat, San Rafael Creek, eelgrass beds, or other sensitive areas; description of dredging methodology (i.e., mechanical dredging versus hydraulic dredging); potential sources of dredged material, including use of material dredged from San Rafael Creek; methods of importing, offloading, and placement of any dredged material; public access elements including trails or overlooks and anticipated level of human presence; phasing/timing of Project; any short-term or long-term use of artificial lighting; and construction schedule, activities, equipment, and crew sizes.

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.

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 4 of 12

CDFW therefore offers the comments and recommendations below to assist the City of San Rafael in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on special-status species and their habitats.

Special-Status Species

Sufficient information regarding the environmental setting is necessary to understand the Project's and its alternatives' significant impacts on the environment (CEQA Guidelines, §§15125 & 15360). CDFW recommends that the draft EIR provide baseline habitat assessments for special-status plant, fish, and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, §15380).

Fully protected, threatened or endangered, candidate, and other special-status and sensitive species that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to:

- California Ridgway's rail (*Rallus obsoletus obsoletus*), federally and State endangered and State fully protected,
- California black rail (*Laterallus jamaicensis coturniculus*), State threatened and State fully protected,
- Brown Pelican (*Pelecanus occidentalis californicus*), State fully protected,
- Salt-marsh harvest mouse (*Reithrodontomys raviventris*), federally and State endangered and State fully protected,
- Longfin smelt (*Spirinchus thaleichthys*), federal candidate and State threatened,
- Chinook salmon (*Oncorhynchus tshawytscha*), federally and State threatened (Spring-run), federal and State endangered (Winter-run),
- Steelhead (*O. mykiss*), federally threatened (Central California Coast and Central Valley Evolutionarily Significant Units),
- Green sturgeon (*Acipenser medirostris*), federally threatened and State species of special concern (southern Distinct Population Segment),
- White sturgeon (*A. transmontanus*), State species of special concern,
- Western snowy plover (*Charadrius nivosus nivosus*), federally threatened and State species of special concern,
- Burrowing owl (*Athene cunicularia*), State species of special concern,
- Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), State species of special concern,

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 5 of 12

- San Pablo song sparrow (*Melospiza melodia samuelis*), State species of special concern,
- Yellow rail (*Coturnicops noveboracensis*), State species of special concern,
- Western pond turtle (*Emys marmorata*), State species of special concern,
- Nesting and foraging migratory birds.

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*).

Habitat descriptions and species profiles should include information from multiple sources such as aerial imagery, available historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from “positive occurrence” databases such as California Natural Diversity Database (CNDDDB). Based on the data and information from the habitat assessment, the CEQA document can then adequately assess which special-status species are likely to occur in the Project vicinity.

CDFW recommends that during Project planning and prior to Project implementation, surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines for some species are available at:

<https://wildlife.ca.gov/Conservation/Survey-Protocols>.

Botanical surveys for special-status plant species, including those listed by the California Native Plant Society (<http://www.cnps.org/cnps/rareplants/inventory/>), should be conducted during the appropriate blooming period for all sensitive plant species potentially occurring within the Project area and require the identification of reference populations. Please refer to CDFW protocols for surveying and evaluating impacts to rare plants available at: <https://www.wildlife.ca.gov/Conservation/Plants>.

IMPACT ANALYSIS AND MITIGATION MEASURES

The CEQA Guidelines (§15126.2) necessitate that the draft EIR discuss all direct and indirect impacts (temporary and permanent) that may occur with implementation of the Project. This includes evaluating and describing impacts such as:

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 6 of 12

- Potential for “take” of special-status species;
- Loss or modification of breeding, nesting, dispersal, and foraging habitat, due to Project activities including, but not limited to, vegetation removal, alteration of soils and hydrology, and removal of habitat structural features;
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic, or human presence; and
- Obstruction of movement corridors, fish passage, or access to water sources and other core habitat features.

The CEQA document also should identify reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project’s contribution to the impact (CEQA Guidelines, §15355). Although a project’s impacts may be insignificant individually, its contributions to a cumulative impact may be considerable. Contribution to a significant cumulative impact (e.g., reduction of available habitat for a listed species) should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

Based on the comprehensive analysis of the direct, indirect, and cumulative impacts of the Project, the CEQA Guidelines (§§15021, 15063, 15071, 15126.2, 15126.4 and 15370) direct the Lead Agency to consider and describe all feasible mitigation measures to avoid potentially significant impacts in the draft EIR, and/or mitigate significant impacts of the Project on the environment. This includes a discussion of take avoidance and minimization measures for special-status species, which are recommended to be developed in early consultation with the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service and CDFW. These measures can then be incorporated as enforceable Project conditions to reduce potential impacts to biological resources to less-than-significant levels.

Measures recommended by CDFW to avoid and minimize impacts to special-status species include, but are not limited to, clearly marking suitable habitat for the species; minimizing ground disturbance and the removal of vegetation suitable for the species; utilizing seasonal work windows; and having a CDFW-approved qualified biologist present during Project activities.

Impacts to State Fully Protected Species

State fully protected species such as California Ridgway’s rail, California black rail, brown pelican, and salt-marsh harvest mouse may occur within the Project area. State fully protected species may not be taken or possessed at any time except for necessary scientific research, including efforts for recovery (Fish and Game Code §§3511 and

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 7 of 12

4700). Therefore, the draft EIR should include measures to ensure complete take avoidance of these fully protected species.

Measures to avoid impacts to rails may include, but are not limited to, having a CDFW-approved qualified biologist conduct surveys for both California Ridgway's rail and California black rail using protocols in coordination with staff from CDFW and the USFWS; avoiding Project activities during the rail breeding season (extends from February 1 to August 31); implementing a no-work buffer within a minimum 700 feet of breeding rail call centers; and utilization of portable acoustic and/or visual barriers between Project activities and rails.

Measures to avoid impacts to salt-marsh harvest mouse may include, but are not limited to, conducting removal of vegetation suitable for the species with non-motorized hand tools; limiting the number of workers conducting vegetation removal per qualified biologist on-site; conducting vegetation removal in the direction of large, contiguous suitable habitat that will remain undisturbed; placing stockpiled vegetation outside of areas where they may be recolonized by the species; and staging equipment and materials away from suitable habitat for the species.

Impacts to Other State Special-Status Species and Commercially/Recreationally Important Species

State threatened or endangered fish and wildlife species, State species of special concern, and commercially/recreationally important species may occur within the Project area. Depending on the proposed methods and time of year work is conducted, and without appropriate mitigation measures, the Project could potentially have a significant impact on these species. Potential impacts to special-status and commercially/recreationally important species include, but are not limited to, hydroacoustic impacts caused from impact pile driving during crane platform construction; potential for entrainment and/or impingement of fish and invertebrates from suction dredging and placement of dredged material via slurry pumping; impacts to Pacific herring spawning habitat; injury to aquatic species due to decreased dissolved oxygen; inability of aquatic species to forage due to increased turbidity; reduced reproductive success; nest abandonment; loss of nesting and foraging habitat; impacts to wetland and tidal mudflat habitat; loss of habitat due to habitat type conversion; and direct mortality. Unauthorized take of species listed as threatened or endangered pursuant to CESA is a violation of Fish and Game Code.

If State species of special concern are found within or adjacent to the Project site, a qualified biologist should establish a no-disturbance buffer appropriate for the species and conduct on-site monitoring during all Project-related activities. The draft EIR should include additional minimization and mitigation measures for each State species of special concern that could be potentially impacted by Project activities.

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 8 of 12

Impacts to Nesting Birds

CDFW recommends that Project implementation occur during the bird non-nesting season. However, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season [February through early-September (see above under State Fully Protected Species regarding the rail breeding season)], the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or Fish and Game Code.

To evaluate and avoid potential impacts to nesting bird species, CDFW recommends that a qualified avian biologist conduct surveys for active nests no more than seven (7) days prior to the start of Project activities involving ground or vegetation disturbance and every fourteen (14) days during Project activities to maximize the probability that active nests within the construction area are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. Prior to initiation of ground or vegetation disturbance, CDFW recommends that a qualified biologist conduct surveys to establish a behavioral baseline of all identified nests. Once Project activities begins, CDFW recommends having the qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes (e.g., alertness, sitting up from brooding position, flying off the nest, alarm calling, etc.) occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified avian biologist is not feasible, CDFW recommends implementing appropriate buffers around active nests based on species, behavior of birds, ambient noise levels, type of construction activities, topography, and other site-specific factors that may affect nesting bird disturbance levels (see above under State Fully Protected Species regarding buffers for rails). Buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these buffers is possible when there is compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified avian biologist advise and support any variance from these buffers.

Impacts to Special-Status Plant Species

State threatened, endangered or rare plant species may occur within the Project location. Without appropriate mitigation measures, the Project could potentially have a significant impact on these species. Potential impacts to special-status plants include inability to reproduce and direct mortality. Unauthorized take of plant species listed as

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 9 of 12

threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

Special-status plants are typically narrowly distributed endemic species. These species are susceptible to habitat loss and habitat fragmentation resulting from construction activities, vehicle and foot traffic, and introduction of non-native plant species.

Special-status plant species should be avoided through delineation and establishment of appropriate buffers from the outer edge of the plant population or specific habitat type required by special-status plant species. Buffers may be determined based on factors including, but not limited to, plant species, type of construction activities, and topography.

Dredged Material as Marsh Fill

CDFW supports the beneficial reuse of dredged material within San Francisco Bay. However, the type of sediment used and the analysis of whether the material is free of potentially harmful substances will determine whether it is suitable at this location to create marsh habitat. Additionally, CDFW has concerns about how the material is dredged and subsequently placed at the site. CDFW recommends that the material be dredged and placed using mechanical methods such as a clamshell dredge or excavator to avoid and minimize potential impacts to sensitive species.

Habitat Conversion

The Project proposes to convert mudflat habitat to a functioning marsh and cobble beach. CDFW has concerns about the loss of mudflat habitat which is utilized by a number of listed and commercially/recreation important species including longfin smelt, chinook salmon, green sturgeon, Dungeness crab, and California halibut. The draft EIR should provide sufficient discussion and analysis on the potential impacts to these species by the loss of habitat. Additionally, the alternatives analysis should contain a range of options, including a reduced marsh and beach size, and whether the Project could still achieve the necessary flood protection by balancing the construction of new marsh/beach habitat and limiting the loss of existing mudflat.

In-Water Work Window

The marine in-water work window is June 1 through November 30. All in-water work should occur within this timeframe. The draft EIR should discuss the proposed Project timeline in detail and highlight whether any conflicts could arise with this work window. CDFW recommends reaching out to CDFW staff with any questions on work windows prior to the release of the draft EIR.

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 10 of 12

Construction of Overwater Structures

There may be potential impacts from the construction of any overwater structure related to the Project such as the crane platform. CDFW recommends that materials and methods used to construct any overwater structures be discussed in the draft EIR. 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 Game Code Section §5650(6)]. 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 limit 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. The draft EIR should discuss the preferred alternatives for pile and decking materials as well as the ability to include decking which allows light penetration.

Sea Level Rise

The State of California Sea-Level Rise Guidance/2018 Update (California Natural Resources Agency 2018) provides a science-based methodology for state and local governments to analyze and assess the risks associated with sea-level rise and incorporate sea-level rise into their planning, permitting, and investment decisions. The Marin Shoreline Sea Level Rise Vulnerability Assessment/Bay Waterfront Adaptation & Vulnerability Evaluation (BayWAVE) (Marin County 2017) provides context and estimates of the physical and fiscal impacts across Marin County's bayside shoreline over the coming decades. It includes sea level rise scenarios ranging from 10 inches in the near-term (15 years) to 20 inches in the medium-term (mid-century) and to 60 inches in the long-term (end of century). Since the Project intends to restore tidal marsh and mudflats that have been lost to erosion over the last 30 years, and that under current conditions, erosion is expected to continue and increase due to sea level rise, CDFW recommends incorporating the long-term (end of century) scenarios for sea level rise to fully evaluate Project impacts.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game 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.

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

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 11 of 12

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:

BE74D4C93C604FA
Gregg Erickson
Regional Manager
Bay Delta Region

DocuSigned by:

3439956B95354BC
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@bcdcc.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

Mr. Paul Jensen
City of San Rafael
March 22, 2021
Page 12 of 12

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

REFERENCES

California Natural Resources Agency. 2018. State of California Sea-level Rise Guidance. https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A OPC SLR Guidance-rd3.pdf

Marin County. 2017. Marin Shoreline Sea Level Rise Vulnerability Assessment/Bay Waterfront Adaptation & Vulnerability Evaluation. Prepared by BVB Consulting LLC for Marin County Department of Public Works, June 2017. https://www.marincounty.org/-/media/files/departments/cd/planning/slr/baywave/vulnerability-assessment-final/final_allpages_bvbconsulting_reduced.pdf?la=en