CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION
REVISED PROJECT APPLICATION FORM

Name of Project: ReWild Mission Bay
Project Applicant: San Diego Audubon
Applicant Contact Person: Andrew Meyer
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ADDITIONAL INFORMATION
Please provide additional information that addresses any of the items on the Application Checklist (Eligibility Requirements, Project Attributes, Applicant Attributes) if it applies to your project. This information will be used for project ranking on the SEP/ECA List. Responses can be provided on separate/additional paper or, if the item is included in a detailed supplemental report, please include the report and indicate where the information is located.

I. Application Form

Problem Statement:

ReWild Mission Bay aims to protect and restore up to 170 acres of wetland habitat in northeast Mission Bay and expand opportunities for compatible community access to the marsh. As in much of Southern California, wetlands in Mission Bay have been drastically altered and destroyed over the past 200 years. Approximately 5 percent of the historic wetlands (i.e., salt marsh, mudflat, salt pan) in Mission Bay remain today. This system-wide destruction has left much of Mission Bay without the functional benefit of wetlands to provide sediment trapping, nutrient uptake, and habitat/cover for native biota. Anticipated sea-level rise poses a significant threat to the remaining wetlands (wholly encompassed within the Kendall Frost/Northern Wildlife Reserve), since little transitional habitat is available for migration.

The ReWild Mission Bay planning area is the most likely area in Mission Bay where wetlands and their associated ecosystem processes can be recovered. The planning area includes the bay's remaining wetlands (jointly owned by the City of San Diego and the University of California) and adjacent City-owned parkland currently used for RV camping, mobile homes, and other recreation (and which is specifically called out in the Mission Bay Master Plan as available for wetland restoration). Removing fill, lowering the elevation, and restoring vegetation can meaningfully recover wetlands and their processes in this planning area.

In addition to the wetland habitat, the planning area also includes areas that could be restored to native upland habitats, areas for upslope marsh migration as sea levels rise, and public recreation and education opportunities. (For a full description of the effort, the site, and the project's history, see pages 4-8 of the attached Coastal Conservancy Staff Recommendation.)

In 2014, the first step of ReWild Mission Bay, a Feasibility Study, was fully funded jointly by the California State Coastal Conservancy and the U.S. Fish and Wildlife Service (referred to as the Mission Bay Wetlands Conceptual Plan). Through an iterative process of public input, robust scientific and regulatory review, and guidance from a steering committee, this project will yield at least three feasible restoration alternatives by May 2017. From there, San Diego Audubon will continue to work closely with the City of San Diego to implement future phases of ReWild Mission Bay, including the deliverables described below.

Work Plan containing tasks and deliverables compartmentalized into partial funding opportunities, if applicable.

- Task 1: Finish feasibility study
    - Deliverables: Draft and Final Feasibility Report, final presentation, integration of Feasibility Report into City planning process, identification of deliverables and costs for future project tasks
- Task 2: Project approvals by San Diego City Council and CA Coastal Commission
- Task 3: Restoration Design
- Task 4: Environmental Review
- Task 5: Final Engineering and Design
- Task 6: Construction
- Task 7: Post construction monitoring

Timeline (from funding approval) with milestones and end dates.

The following timeline assumes a funding date of January 1, 2017 to allow for inclusion of end dates. However, total time from funding approval is included parenthetically.

- January 1, 2017-May 31, 2017: Finish feasibility study (end date 4 months from funding approval)
- June 1, 2017-May 31, 2018: Approval by the San Diego City Council and CA Coastal Commission (end date 16 months from funding approval)
- June 1, 2018-May 31, 2020: Restoration design and CEQA/NEPA (end date 3 years, 4 months from funding approval)
- June 1, 2020-May 31, 2021: Final engineering and design (end date 4 years, 4 months from funding approval)
- June 1, 2021-May 31, 2024: Construction (end date 7 years, 4 months from funding approval)
- June 1, 2024-May 31, 2034: Post restoration monitoring (end date 17 years, 4 months from funding approval)

Budget broken down into tasks.

The Feasibility Study described above is scheduled for completion in May 2017. At that point, it will be possible to create an estimated budget for the future tasks of the ReWild Mission Bay effort. Once these estimates are created, San Diego Audubon will

submit them to the San Diego Regional Water Quality Control Board as an update to this project description. Until then, the following estimates were generated based upon input from expert staff from our project partners:

- Task 1: Finish feasibility study
    - Deliverables: Draft and Final Feasibility Report, final presentation, integration of Feasibility Report into City planning process, identification of deliverables and costs for future project tasks
    - Budget:

Description	Units	Total
Staff time: $45/hour	400	$18,000
Supplies		$2,000
	Total	$20,000

- Tasks 2-5 (very rough estimate): $2,000,000
- Tasks 6-7: Estimates available pending finalization of ReWild MB Feasibility Study in May 2017, final budget pending alternative selection
    - Construction costs are highly dependent on the scope of the restoration alternative chosen with the amount of earthwork (soil excavation and associated beneficial use/disposal) being the primary driver.

Discuss all permitting requirements, including CEQA, and their status. If exempt, cite applicable statute.

A preliminary regulatory framework was developed for the ReWild Mission Bay Feasibility Study's Opportunities and Constraints Report. Please see Appendix A (page 30) of that report (included with submittal). Regarding status: no work has been done on environmental review (CEQA & NEPA) or permitting. The current planning study (conceptual plan development/feasibility study) is exempt from CEQA.

Watershed(s) affected: Peñasquitos

Describe if this project can be a basis for additional funding from other sources.

Yes. The City of San Diego's Mission Bay Park Improvement Fund provides funding for large-scale improvements in Mission Bay Park (generated from commercial lease holds within the bay). The fund currently identifies $16 million as available for wetlands restoration, which can be secured as match for potential future SEP funding. Additionally, several state and federal agencies have expressed interest in funding this project (e.g., CA State Wildlife Conservation Board, U.S. Fish and Wildlife Service, US Army Corps of Engineers, SANDAG) and the SEP funds would provide important matching funds for future grant opportunities.

Monitoring, success criteria, and other tools to track long-term success.

The development of a long-term adaptive management and monitoring program will be included in the development of restoration designs and would evaluate the success of the project based on the restoration goals set forth in the Feasibility Study. The monitoring protocol will be based upon best practices (including those identified in the San Diego Water Board's Practical Vision Chapter 2).

Description of how the project is resilient to climate change.

The planning area is located in an area that is vulnerable to future sea level rise. According to predictions generated using the Sea Level Affecting Marshes Model (SLAMM), planners should anticipate between 12-18 inches of sea level rise by 2050 and immediately adjacent urban development already experiences periodic flooding (particularly during king tides). Existing development within the planning area, if allowed to remain, would require significant armoring in the face of rising sea levels. The conceptual plan will consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. The restoration of wetlands in the planning area would provide wetland species with upland migration areas and could also reduce flooding impacts on surrounding infrastructure by buffering waves and tides. Expanding habitat would provide resilience to changes in freshwater pulse frequency associated with altered storm regimes resulting from climate change. Finally, healthy cord grass/eelgrass habitats have been associated with a reduction in local impacts of ocean acidification.

Applicant's ability/authority to receive and distribute funds.

Founded in 1948, the San Diego Audubon Society (a 501(c)(3) non-profit organization) has served the San Diego region for over 60 years. Its mission is to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and advocate for a cleaner, healthier environment. San Diego Audubon has been restoring sensitive dune and salt marsh habitats and maintaining California least tern nesting sites in Mission Bay for over 20 years. It has a skilled team of staff dedicated to the ReWild Mission Bay effort, and a working Board made up of highly respected and influential scientists and community members. This fiscal year, the grantee will manage approximately $915,000 in grants and other funding.

Is the project to conduct work that is required by any entity/agency? (e.g. cleanup or mitigation)

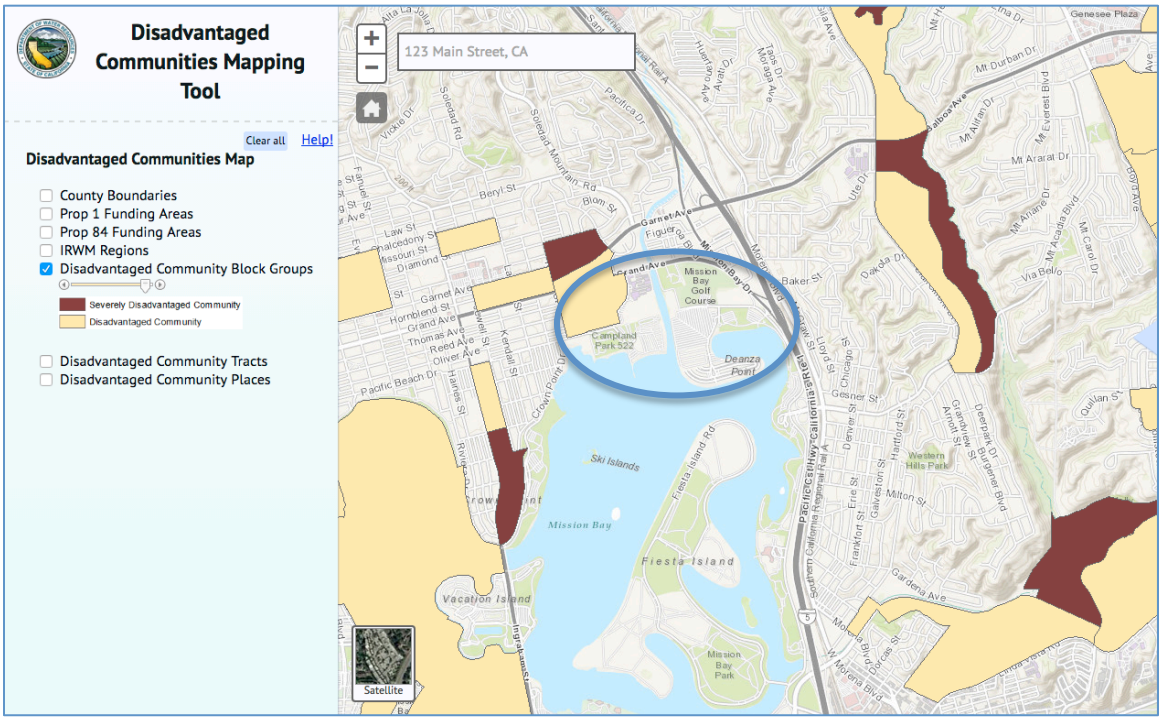
No.

II. Eligibility Requirements

Projects must address at least one of the following priorities to qualify for further evaluation and inclusion in the SEP/ECA List. To the extent that they apply to your project, please make sure to describe these in your proposal.

1. *Does the project address an environmental justice (EJ) issue or benefit a disadvantaged community (DAC)?*

Yes. According to the California Department of Water Resources (DWR), the census group block immediately adjacent to portions of the existing and proposed wetlands is identified as "Disadvantaged" and the census group block immediately adjacent to the "Disadvantaged" block is identified as "Severely Disadvantaged". The "Severely Disadvantaged" census group block is less than one-half mile from the existing marsh. Additionally, four other census group blocks within a one-mile radius are identified by the DWR as either "Disadvantaged" or "Severely Disadvantaged". The DWR data is based on Proposition 84 Integrated Regional Water Management guidelines (2015) using data from the U.S. Census. (See map below, with the general ReWild planning area indicated by the blue circle. A complete planning area map is included with submittal.)



Map generated by https://gis.water.ca.gov/app/dacs/

2. *Does the project address DAC water related infrastructure needs?*

No.

3. *Does the project promote preservation or restoration of aquatic ecosystems in the San Diego Region?*

Yes. This project aims to protect and restore up to 170 acres of coastal wetland habitat in Mission Bay, San Diego. Coastal salt marsh is the primary aquatic ecosystem

identified for restoration, and significant portions of the project area would also include restoration of eelgrass, mudflat, transitional, and upland habitats as well.

Additionally, this project was added to the Southern California Wetlands Recovery Project Work Plan in 2013 and was identified as one of three priority regional wetlands restoration projects by the San Diego Regional Water Quality Control Board Resolution No. R9-2015-0041 (Resolution to support restoration of aquatic ecosystems in the San Diego region; June 24, 2015)

4. *Does the project implement or further recovery of streams, wetlands, and riparian systems?*

Yes, this project specifically addresses the recovery of wetland systems. The existing Kendall Frost Mission Bay Marsh Reserve/Northern Wildlife Preserve includes approximately 40 acres of wetland habitat in the northeast corner of Mission Bay. The existing marsh is highly impacted by adjacent urban development through runoff, presence of urban predators, limited freshwater/sediment inputs, and minimal available space for upland-wetland migration in the face of sea level rise. By expanding the existing marsh via restoration of immediately adjacent City-owned properties, this project implements the recovery of Mission Bay's wetland systems.

Through the years, Mission Bay has experienced significant type conversion from a salt marsh estuary to an embayment dominated by open water and subtidal habitats (including eelgrass) as a result of anthropogenic modifications to the physical characteristics of the bay (mostly via dredging). Hydrologic changes (via re-routing of the San Diego River and channelization of Rose Creek) are also significant and have changed patterns of chemical characteristics (particularly with respect to salinity, nutrients, contaminants, and dissolved oxygen).

5. *Does the project implement or further the monitoring and assessment framework in the San Diego Water Board's Practical Vision Chapter 2?*

Development and implementation of a long term adaptive management and monitoring program for the restored wetlands is a key task within the overall goal of ReWild Mission Bay. Once developed, this plan will further the monitoring and assessment framework included in the San Diego Water Board's Practical Vision.

6. *Does the project implement or further a strategy for achieving a sustainable local water supply?*

No.

III. Project Attributes

Eligible projects will also be evaluated based on the following attributes. To the extent that they apply to your project, please make sure to describe these in your proposal.

1. *Does the project directly contribute to improvements of water quality objectives and/or beneficial uses?*

Yes. The tidal wetlands of Southern California are part of a large mosaic that functions as an interconnected system. The restoration of Mission Bay's wetlands will not only provide improvements in water quality, but also an expanded migratory bird stopover area, a source for seed and larvae, and habitat for State and Federal threatened and endangered species. These wetlands will contribute to water quality improvements in Mission Bay both by acting as a filter through which freshwater and sediment from Rose Creek must first pass before reaching the bay, but also as the marsh is inundated with bay water at high tides.

2. *Does the project propose measurable environmental outcomes?*

During the currently-underway Feasibility Study, the project team (including a Science and Technical Advisory Committee) worked with the community to finalize three main project goals that will inform the development and selection of the final four conceptual plans:

- Restore, enhance and/or create estuarine habitats (intertidal mudflat, salt marsh, tidal channels, & marsh/upland ecotone) to provide ecosystem functions and services, such as water quality improvement, shoreline stabilization, carbon sequestration, resistance and resilience to climate change and associated effects, and fish & wildlife support.
- Protect the existing and restored estuarine habitat and associated wildlife from detrimental anthropogenic impacts (direct and indirect) associated with surrounding development.
- Provide new and/or improve opportunities for public access, education, research, and recreation in ways that improve understanding and stewardship while protecting the existing and restored estuarine habitats and associated wildlife.

As these plans move forward in the development process and a final plan is chosen for the area, SMART restoration objectives will be developed (specific, measurable, achievable, realistic, and time-bound) that focus on conservation and environmental outcomes.

3. *Does the project demonstrate sustained longevity of environmental outcomes (e.g., conservation, maintenance endowments, easements, monitoring)?*

Yes. The two landowners of this project, the City of San Diego and the University of California, have both made specific, approved, consistent, long-term investments in the project area. The University of California manages the existing reserve through the University of California Natural Reserve System and the City-owned parcels are funded jointly by the City of San Diego's General Fund and Mission Bay Park Improvement Fund. Several community non-profits (including San Diego Audubon) have also made considerable investments of staff time and effort into this project. Jointly, these groups will

ensure the sustained longevity of this project in terms of maintenance and monitoring (although this may also be funded through whatever means are developed to fund the restoration itself).

4. *Is the project part of a larger vetted, adopted, or established plan with support from multiple and diverse partners?*

Yes. The legislative acts from the early-mid 20th century that granted title of Mission Bay Park tidelands from the California State Lands Commission in trust to the City of San Diego calls for Mission Bay to be developed in accordance with specific Public Trust uses (which includes the preservation of lands in their natural state and restoration activities to support that). Specifically, the restoration of wetlands in northeast Mission Bay is called for in the 1994 update to the City of San Diego's Mission Bay Park Master Plan, which was approved by the CA Coastal Commission in 1995 (though is not a certified segment of the City's LCP and therefore remains under the jurisdiction of the Commission), and the existing Mission Bay Natural Resources Management Plan. This particular restoration project is part of the Southern California Wetlands Recovery Project's Work Plan, which is a mutually vetted list of priority restoration projects in Southern California approved by the WRP's 18 partner agencies. Most recently (2014), this effort was included as one of three priority projects in a resolution from the San Diego Regional Water Quality Control Board in their effort to support wetlands restoration in the region.

5. *Does the project improve conditions for a 303(d) limited segment or preserve conditions in a high quality water body?*

Yes. This project improves conditions for 303(d) limited segments, including at the mouth of Rose Creek, along Mission Bay shorelines (including Campland and De Anza), and in open water of Mission Bay. The Clean Water Act Section 303(d) listed pollutants in Rose Creek include selenium and toxicity. Beneficial uses of Rose Creek are affected by the pollutants found within the waterbody. Designated beneficial uses of the inland surface waters of Rose Creek consist of contact and non-contact recreation, warm freshwater habitat, and wildlife habitat. The extent of impairment includes 13 miles of Rose Creek for selenium and toxicity. The mouth of Rose Creek, at Mission Bay, is also listed for eutrophication and lead for an impacted area of 9.2 acres. Rose Creek is impaired for warm freshwater habitat use due to selenium and toxicity. Additionally, the mouth of Rose Creek is impaired for marine habitat use due to lead and potential eutrophic conditions.

Both Campland and De Anza Cove shorelines are Section 303(d) listed for enterococcus, fecal coliform, and total coliform. These pollutants affect the beneficial uses of the Campland and De Anza Cove shorelines. The extent of impacted shoreline areas for indicator bacteria pollutants in Campland and De Anza Cove are 0.08 miles and 0.06 miles, respectively. Both the shorelines are impaired for water contact recreation use and shellfish harvesting use due to indicator bacteria.

Sources:

1. AMEC 2015. Mission Bay Watershed Management Area Water Quality Improvement Plan. Prepared by AMEC Foster Wheeler Environment &

Infrastructure, Inc. (AMEC). Submitted to the San Diego Regional Water Quality Control Board by the County of San Diego and Caltrans. June 2015.
2. SWRCB 2015. Final 2012 California Integrated Report (Clean Water Act Section 303(d) List/ 305(b) Report), Staff Report, Appendix A: Category 5 List (2012 California 303(d) List Of Water Quality Limited Segments). Prepared by State Water Resources Control Board (SWRCB). April 2015.

6. *Does the project improve a designated priority listed in a Water Quality Improvement Plan?*

No. To the best of our knowledge, restoration of wetlands in Mission Bay was not designated as a priority in the Mission Bay Watershed WQIP (despite suggestions from stakeholders).

7. *Does the project improve conditions of a key beneficial use category in a key area?*

Yes. Mission Bay is identified as a key area for the following key beneficial uses, which are to be improved by completion of this project: fish and shellfish consumption (second rank), recreation-1 (second rank), recreation-2 (first rank), and habitats & ecosystems (second rank).

8. *Does the project address the source of the problem at/near the source of the problem?*

Yes. A main source for this problem is the destruction of wetlands by local, state, and federal agencies in the mid 20th century. By restoring wetlands, this project will repair the loss of the ecosystem services the wetlands once provided. This project does not address the source of problems related to pollution, global climate change, or overfishing but may help to ameliorate their effects.

9. *Does the project address problems to sensitive/vulnerable/rare places/waters/uses?*

Yes. Coastal wetlands are sensitive, vulnerable, and rare places in the state of California, owing in large part to their large scale destruction in the previous century. This project aims to protect one of the rare remaining wetlands and expand it to lessen its vulnerability to stressors. By doing so, a sensitive/vulnerable/rare use (access to a natural coastline) will also be addressed.

10. *Can the project be used for leverage for other funding/actions/benefits?*

Yes. SEP funds would be eligible to use as matching funds for future grant applications to the state and federal agencies that have already expressed interest in funding portions of this project.

11. *Does the project provide a cost-effective means of attaining water quality goals?*

While there may be more cost effective ways to address *only* the immediate water quality goals of this project through the construction of a water treatment facility at the mouth of Rose Creek, such a facility would require long-term maintenance beyond that which a well functioning wetland system would require. Such a facility would also not provide the other benefits (wildlife, recreational, ecosystem functions, etc.) that a restored wetland will.

12. Does the project integrate outreach and education to targeted audiences?

Yes. Built into the vision of ReWild Mission Bay is an effort to expand opportunities for compatible community access. This vision was codified in the official goal of ReWild MB to provide new and/or improve opportunities for public access, education, research, and recreation. The targeted audiences are addressed in the draft objectives for this goal (currently under development), which address under-served communities, Native American communities, and other groups not traditionally engaged with habitat restoration, along with students from local elementary and high schools and researchers from local universities.

REWILD MISSION BAY- A PROJECT OF SAN DIEGO AUDUBON

www.rewildmissionbay.org

Updated: May 2016

Study Area

ReWild Mission Bay is a project of San Diego Audubon and our partners to **enhance and restore wetland habitat** in the northeast corner of Mission Bay at the mouth of Rose Creek **for the benefit of wildlife and the community**. The study area (black outline) for ReWild Mission Bay includes "Restoration Focus Areas" (red outlines), which are parcels described in the **Mission Bay Park Master Plan** as opportunities for wetlands restoration. The study area also includes adjacent areas of the park that need to be considered to understand the impacts of adjacent use.

For more info about ReWild Mission Bay- visit http://rewildmissionbay.org

* Map produced by GIS Services of the Carlsbad U.S. Fish & Wildlife Office. GIS contact: Tony McKinney. Biology contact: Carolyn Lieberman. Map date: 27 May 2014. Data source: San Francisco Estuary Institute. Image source: USDA NAIP 2012.

ReWild Mission Bay: Opportunities and Constraints

Final Report

The following document describes opportunities and constraints in the ReWild Mission Bay study area. The report is part of the development of ReWild Mission Bay Conceptual Restoration Plan Alternatives, the feasibility study portion of ReWild Mission Bay. Inquiries may be directed to Rebecca Schwartz Lesberg, ReWild MB Project Manager, by phone at 858-273-7800 x 101 or email at schwartz@sandiegoaudubon.org.

ReWild Mission Bay:

DEVELOPMENT OF RESTORATION PLAN ALTERNATIVES

OPPORTUNITIES AND CONSTRAINTS

Final Draft

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August 2016

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BMP	Best Management Practice
BO	Biological Opinion
Campland	Campland on the Bay
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of San Diego
CLOMR	Conditional Letter of Map Revision
Corps	U.S. Army Corps of Engineers
CPWMS	Crown Point Wetland Mitigation Site
CWA	Clean Water Act
DA	U.S. Department of the Army
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
KFMR/NWP	Kendall-Frost Marsh Reserve/Northern Wildlife Preserve
LCP	Local Coastal Plan
LOMR	Letter of Map Revision
MBPMP	Mission Bay Park Master Plan
MLLW	mean lower low water
MPRSA	Marine Protection, Research, and Sanctuaries Act
MSL	mean sea level
NAVD88	North American Datum of 1988

NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
PRC	Public Resources Code
ReWild MB	ReWild Mission Bay Project
RFA	Restoration Focus Area
RV	recreational vehicle
SAA	Streambed Alteration Agreement
SLC	State Lands Commission
SLR	sea-level rise
SMARA	Surface Mining and Reclamation Act
SSA	Special Study Area
UC	University of California Natural Reserve System
U.S.	United States
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

1. OPPORTUNITIES AND CONSTRAINTS

1.1 INTRODUCTION

The ReWild Mission Bay Project (ReWild MB) Study Area is located in the northeast corner of Mission Bay, including the mouth of Rose Creek and the Kendall-Frost Marsh Reserve/Northern Wildlife Preserve (KFMR/NWP). Within the Study Area, there are three Restoration Focus Areas (RFAs), namely, KFMP/NWP, Campland on the Bay (Campland), and De Anza Special Study Area (De Anza SSA). Figure 1 is a vicinity map of ReWild MB, including boundaries of the Study Area and RFAs.

Figure 1. ReWild Mission Bay Vicinity Map

ReWild MB provides opportunities to restore, enhance, and preserve wetland habitats as well as improve ecosystem services and public use. There are also constraints that need to be considered for the successful development and implementation of ReWild MB alternatives. This report discusses the opportunities and constraints identified based on the data and

information provided in the Existing Conditions Report. Key considerations include ownership and land use, topography, sea-level rise (SLR), biology/ecology, hydrology, water quality, flood risk reduction, soil disposal, cultural resources, public access/recreation/ education, infrastructure, legal/ political/ and regulatory environment. Opportunities and constraints discussed in this report focus on the RFAs, but include considerations for the entire Study Area.

1.2 OPPORTUNITIES

Opportunities that help define potential restoration alternatives and evaluate associated feasibility are discussed below.

1.2.1 Ownership & Land Use

The City of San Diego (City) owns the majority of the Study Area, with the exception of the KFMR, which is owned by the Regents of the University of California (UC), managed by its Natural Reserve System, and used as an educational and research site. ReWild MB provides an opportunity for the KFMR/NWP RFA to be enhanced and preserved for wildlife habitat. Campland has been operated as a recreational campground under a lease which will expire in 2017. The lease for De Anza SSA expired in 2003. These lease expirations provide opportunities for wetland restoration, expansion, and creation as well as opportunities to obtain wetlands mitigation credits for future development projects.

The Mission Bay Park Master Plan (MBPMP) (WRT 2002) calls for habitat restoration in the entirety of Campland and all or a portion of the De Anza SSA. Regarding Campland, the MBPMP states that “an 80-acre saltwater marsh is proposed west of Rose Creek”, which “requires the relocation of the Recreational Vehicle Park” that is currently within Campland (page 10, MBPMP). For De Anza SSA, the MBPMP states that “additional wetlands creation must be considered as part of the SSA” (page 53, MBPMP).

Outside the RFAs, additional properties within the Study Area (including the golf course, Boat & Ski Club, and open water in Mission Bay and De Anza Cove) are owned by the City and have relatively few buildings and structures. These areas provide opportunities to influence redevelopment in ways that would complement wildlife habitat and provide a buffer between heavy human use areas and wildlife habitat. With expanded wetland footprint provided by the Campland and De Anza SSA RFAs, buffer zones could also be added between wildlife habitat and human activities without causing community disruption and incurring expensive costs of land acquisitions and infrastructure removals.

1.2.2 Topography

Different habitat types thrive in different elevation ranges. The elevation ranges for the coastal wetland habitats in Mission Bay under existing mean sea level (MSL) conditions (*i.e.,* without additional SLR) are described in the Existing Conditions Report and are listed in Table 1. Figure 2 shows the existing ground elevations in the Study Area. Comparing the existing elevations with the ranges in Table 1 reveals that: (i) the topography/bathymetry in KFMR/NWP mostly supports coastal salt marsh habitat with limited areas at higher elevations for transitional and upland habitat, and (ii) the existing elevations in Campland and De Anza SSA ranging from 8 to 20 ft NAVD88 are mostly above coastal salt marsh habitat elevation ranges. The KFMR/NWP habitat can benefit by restoring the adjacent land, which provides an opportunity to increase the wetland footprint as well as areas for transition zone and upland habitat. The higher elevations in Campland and De Anza SSA, while being a potential constraint to restore salt marsh habitat (see Section 1.3.2), would require only moderate grading for transitional and upland habitat restoration/creation. The elevated landforms in Campland and De Anza also provide a potential opportunity to control water flow for the restored wetland (*e.g.,* redirect Rose Creek). In addition, by beneficially using the material excavated from higher ground in Campland and De Anza SSA, there is an opportunity to transform open water area in the Study Area (*e.g.,* De Anza Cove) to intertidal wetland habitat. The other opportunity for adaption to SLR that is presented by the higher elevations of the Campland and De Anza RFAs is discussed in the next section.

Table 1. Elevation Ranges of Coastal Wetland Habitat in Mission Bay

HABITAT	ELEVATION RANGE (FT, MLLW)		ELEVATION RANGE (FT, NAVD88)	
	LOWER	UPPER	LOWER	UPPER
Subtidal	--	0.0	--	-0.2
Mudflat	0.0	3.0	-0.2	2.8
Low Salt Marsh	3.0	5.0	2.8	4.8
Mid Salt Marsh	4.0	5.7	3.8	5.5
High Salt Marsh	5.5	7.5	5.3	7.3
Salt Panne	5.5	7.5	5.3	7.3
Transition Zone	7.5	9.5	7.3	9.3
Upland	9.5	--	9.3	--

Source: NOAA

Figure 2. Existing Topography (Surveyed 2009-2011)

1.2.3 Sea-Level Rise

The current California Coastal Commission (CCC) SLR Policy Guidance (CCC 2015) is based on SLR projections developed by the National Research Council (NRC) in 2012. The NRC 2012 SLR projections for Year 2050 and Year 2100 are up to 2 feet and up to 5.5 feet, respectively. Some existing elevations within the RFAs, such as the shoreline areas in Campland and De Anza SSA, would likely support coastal salt marsh habitat in the future with projected SLR. There is an opportunity to implement "wetland migration", such that habitats would be designed, graded, and allowed to shift to wetlands in response to SLR. For example, transition zone and low elevation uplands might be designed to shift to coastal salt marsh, while low intertidal habitat might be designed to shift to subtidal habitat. Through usage of wetland migration, there is an opportunity for future wetland restoration with minimal or no grading now, particularly with the parts of the Study Area that are adjacent to the current shoreline.

Wetland restoration for ReWild MB would provide an opportunity to alleviate the impact of projected SLR (*e.g.,* tidal inundation) to the coastal developed area. Under the NRC 2012 SLR projections, much of the existing ground in Campland and De Anza SSA would be inundated during high tide conditions and flooded during storm events (fluvial and waves), thereby impacting human land uses such as trailer parks and RV camping. The restored wetland would provide a buffer to inland infrastructure and residential development from tidal inundation and coastal flooding in the future with SLR. Sediment augmentation may also be used in conjunction with wetland restoration efforts, to help offset the combined effects of SLR and land subsidence, as applicable.

1.2.4 Biology/Ecology

There is great potential to increase ecological values at Campland and De Anza SSA as these RFAs are currently composed primarily of paved areas for recreational vehicles (RVs), mobile homes, and associated supporting uses, including non-native ornamental landscaping. Historically, all of Campland and a portion of De Anza SSA were wetlands, including intertidal mudflat and salt marsh habitats that were filled when False Bay was converted to Mission Bay (SFEI 2016). The original wetland soils are generally thought to remain in place under this fill, though not much definitive information regarding the soils underlying the fill is available. If the original wetland soils remain in place, there may be an opportunity to successfully reintroduce wetland plants to the area upon fill removal without the need to augment soils with additional soil and/or amendments. This was demonstrated during a study conducted from 1996-1999 by Levin and Talley (2002) during the early development of salt marsh at the Crown Point Wetland Mitigation Site (CPWMS) located within KFMR, where salt marsh established more readily in areas where historical marsh soils were exposed as compared with areas where remnant fill sediments remained in place.

Wetlands restoration provides the opportunity to increase the area available for habitats that support sensitive species, other wildlife and plant species, and wildlife breeding and nesting. These ecological functions are likely to be established readily since the existing wetlands (*e.g.*, at KFMR/NWP) already contain sensitive species and other wetland wildlife and plant species. Restoration of intertidal mudflat, intertidal salt marsh, and other regionally rare habitat types would result in an increase in habitat types that support a variety of plants and wildlife, possibly including the expansion of threatened and endangered species populations and the recovery of diminished plant diversity. Restoration of coastal salt marsh and mudflat habitats at Campland and De Anza SSA would also provide an opportunity to eliminate the non-native landscaping that is currently present in these areas.

The presence of the KFMR/NWP provides an opportunity to restore coastal salt marsh in proximity to existing, functional coastal salt marsh. Creating additional salt marsh habitat adjacent to the existing KFMR/NWP would result in a larger, continuous habitat area, thus reducing the proportion of the area exposed to detrimental edge effects and increasing

ecological functions. Connected habitats facilitate wildlife movement and range, support species stability and potential population growth, benefit foraging bird species, and provide refuge for wetland-associated birds during high tides and storm events. Transitional and upland habitats may also be used to provide such connectivity between wetlands habitats. As a part of the wetland enhancement efforts at the KFMR/NWP, there are opportunities to move the main tidal slough away from the Crown Point Villa Condominiums and create more transition zone between developed and restored areas; move the fence along the bottom of the slope on Crown Point Drive to the top to allow for vertical migration of marsh habitat with SLR; create habitat for salt marsh skipper and salt-marsh bird's beak in the vicinity of the berm between the existing marsh and the CPWMS; enhance and elevate the existing upper marsh with inflows of sediment and nutrients associated with freshwater flows; regrade the CPWMS to achieve its original mitigation goals and better ecological functioning; develop a permanent means of preventing intrusion of artificially introduced coarse grain sand from beaches along Crown Point Drive; remove the existing sand pile adjacent to the CPWMS to prevent continued pollution of the adjacent marsh; and remove and replace various non-native plants that populate the sand dunes (*i.e.,* Southern Foredunes, as shown in Figure 19 of the ReWild MB Existing Conditions Report) with native species. It will be necessary to protect the surrounding areas and habitats during restoration activities, especially those that support migrating, rare, threatened, and/or endangered species.

The large size of the RFAs would allow inclusion of transitional and upland habitats that support a greater variety of species (including regionally rare species), provide adaptation to SLR, and help restore the balance of wetlands habitat with adjacent higher habitats. Coastal wetlands provide a nursery habitat for the commercially important California halibut, and the dense marsh vegetation provides a habitat for Belding's Savannah Sparrows and other important species. Realignment of Rose Creek has been proposed in some previous studies of the Study Area, which could provide freshwater enhancement opportunities, and potentially nourish the wetland habitats with sediment. Depending on the extent of restoration at Campland and De Anza SSA, there may be an opportunity to redirect all or a portion of Rose Creek into newly restored areas to provide ecosystem services for those areas. Realignment of all or a portion of Rose Creek to the existing KFMR/NWP, for example, may provide similar functions. Opportunities for the overall Study Area include improved connectivity of restored habitats in the RFAs. Although not within the scope of this project, there may be future opportunities to restore portions or all of the golf course, Boat & Ski Club, and other areas surrounding the Study Area; which, if connected with restored areas within the Study Area, would result in a larger continuous habitat area and opportunity for further enhancement of ecological functioning. Additional opportunities for consideration include restoration of other historical habitat types, including fresh and brackish water habitats, reintroduction of regionally rare organisms, increased carbon dioxide capture and carbon sequestration associated with expanded areas of salt marsh habitat, and opportunities to stabilize the shoreline and promote sediment accretion through creation of

native oyster reefs—pending the results of the Native Oyster Living Shoreline Project currently underway in south San Diego Bay. Wetland restoration may provide an opportunity to obtain carbon credits, which may be traded, sold, or used later.

1.2.5 Hydrology

Hydrology in the vicinity of the RFAs is dictated primarily by tides, fluvial inputs (*i.e.,* Rose and Tecolote Creeks), and local runoff (*e.g.,* Olney and Noyes storm drains). Proximity of the RFAs and overall Study Area to the open, tidally influenced salt water of Mission Bay provides an opportunity for the restoration of tidal coastal salt marsh habitats and associated wetlands habitats. The location of the Study Area being at the downstream end of Rose Creek provides an opportunity to receive fluvial input in the form of freshwater and sediment. Fluvial flow can enhance water circulation and help keep channels open to tidal exchange. The availability of Campland and De Anza SSA for wetland restoration could provide an opportunity to reconnect historical marsh plains and KFMR/NWP to Rose Creek. Such a reconnection would potentially provide sediment nourishment and pulses of freshwater to enhance the health of KFMR/NWP while providing more direct benefits to the restored estuarine habitat. Rerouting all or a part of Rose Creek through KFMR/NWP, along or near its original historical path, may enhance habitats currently occupied by sensitive species.

At the City owned parcel (known as Frost property) located in the northern part of the KFMR/NMP RFA, improvements funded by the County of San Diego Vector Habitat Remediation Program are currently in the conceptual design stage. These improvements include plans to minimize fresh water ponding at the Noyes Street storm drain outfall discharge location in KFMR/NWP by grading a new tidal channel to connect the current outfall to the existing tidal flow at the KFMR/NWP (ESA 2016). This change would improve drainage performance and eliminate ponding of fresh water, thus decreasing the breeding habitat for mosquitoes, including species carrying the West Nile Virus. The Olney Street Drain currently carries stormwater and tidal flows along the east side of the existing wetlands at too low an elevation to contribute nutrients or sediments, or provide refuge for fish. As such, the improvement project provides an opportunity to integrate the tidal channel into the circulation of the restored area. Depending on project timing, there is also an opportunity for ReWild MB to coordinate efforts for the improvement of the local runoff system with the wetland restoration such that both would benefit from the coordinated effort. So far, a salt marsh expansion design option has been identified for the improvement project, and includes the opportunity to create over two acres of salt marsh habitat that may potentially be used for mitigation banking.

1.2.6 Water Quality

As stated in the Existing Conditions Report, the fluvial input from Rose Creek brings to the Study Area water that is known to have poor water quality, relative to the designated

beneficial uses of Rose Creek and/or the background water quality. With wetland restoration, there is an opportunity to improve water quality by removing human infrastructure and land uses from Campland and De Anza SSA. This change would eliminate pollutant loading that results directly from such anthropogenic sources and potentially reduce the overall concentrations of Clean Water Act (CWA) Section 303(d) listed pollutants in Rose Creek (*e.g.*, selenium, toxicity, eutrophication, lead), which would reduce the impairment of beneficial uses due to those pollutants and improve water quality in Rose Creek, and by extension, the Study Area and Mission Bay. Restored wetlands would also naturally filter runoff and thus, help improve the water quality at existing and proposed restored wetlands as well as within Mission Bay as a whole. Restored areas could help address Section 303(d) listed water quality impairment areas, resulting in cost savings on otherwise needed water quality improvement programs.

Areas within or adjacent to the RFAs that may be planned for human uses (*e.g.* De Anza SSA) may make use of redevelopment to implement stormwater and other surface water Best Management Practices (BMPs) in order to manage water pollution from on-site runoff before those waters discharge into adjacent creeks, wetlands, and greater Mission Bay. Improved water quality from these sites may benefit the ecology/biology of adjacent wetlands and other habitats, as well as surrounding areas that receive those waters, which require their impaired beneficial uses (*e.g.,* water contact recreation and shellfish harvesting at the Campland and De Anza Cove shorelines) to be addressed.

Additionally, the ReWild MB provides an opportunity to consider hydraulically connecting Rose Creek to De Anza Cove (*e.g.,* via culvert or channel), which may improve circulation and thereby enhance water quality in De Anza Cove.

1.2.7 Flood Risk Reduction

Reducing, removing, or otherwise modifying human land use and activities from the RFAs for the ReWild MB, particularly in Campland and De Anza SSA, would present an opportunity to eliminate flood risks to human properties and lives in those areas. Additionally, the restored RFAs would help alleviate flood risks (*e.g.,* due to storm surge and other causes of coastal inundation) to neighboring properties and developments both within and upstream of the Study Area by acting as a buffer area.

Removing fill material at the RFAs may also provide an opportunity to reduce flood risk to the surrounding parts of the Study Area, since excavation would restore some of the flood storage capacity that was lost to infilling (*e.g.,* from when False Bay was converted to Mission Bay). In addition, restored wetlands are naturally resilient to flooding, and would be a suitable type of habitat for such locations.

There is an opportunity to reduce flood risk to the area bordering the Study Area, by increasing the buffer zone between the existing wetland at the KFMR/NWP and the edge of Crown Point Drive, which runs along the western side of the project boundary at the KFMR/NWP. At this location, the slope from the fence up to the street is very steep, and the fence and adjacent area bordering the KFMR/NWP are partly inundated when there is an unusually high tide. By moving the fence higher up on the slope and increasing the buffer zone between wetland and street, the flood risk to this area may be reduced. Additionally, the slope may be graded and its incline made less steep to restore some flood storage capacity and further reduce flood risk to this area.

1.2.8 Soil Disposal

Extensive grade changes within existing habitat areas of KFMR/NWP are not envisioned as part of the ReWild MB, as current elevations may support coastal salt marsh—particularly areas adjacent to the current shoreline. However, some areas may benefit from sediment augmentation, such as lower elevation areas near the shoreline or higher elevation areas which appear to be compressing and experiencing land subsidence. Within the Frost Parcel, Campland and De Anza SSA (which were constructed by fill on estuarine soils in the early 1900s), soils underlying the fill may be suitable to support coastal salt marsh habitat. If it is determined in future phases of project development that the underlying soils are contaminated, then suitable options would be developed to use or dispose of these soils.

Soil disposal methods depend on the soil type and quality (*e.g.,* grain size and level of contamination). Existing clean soils (soils free of contaminants) and non-hazardous contaminated soils (concentrations below acceptable levels) offer opportunities for on-site and off-site beneficial use. If fine-grained materials are found in the existing fill material within the RFAs, there is an opportunity to use such materials as topsoil on the wetlands to be restored. If clean sand is found in the existing material, it may be placed in nearby beaches requiring beach nourishment or used to create sand dunes. Clean fill materials may be used as fill in existing open water if increasing the footprint of restored wetlands is desired. For example, De Anza Cove could be filled to estuarine habitat elevations to provide an opportunity for increasing the restored wetlands footprint. Restoring upland habitats within some areas of the RFAs may also provide an opportunity for using excavated fill materials. Additionally, there may be opportunities to use excavated materials as sediment augmentation to offset the combined effects of SLR and land subsidence, as applicable. These reuses are opportunities for eliminating or reducing soil disposal costs.

The location of the RFAs adjacent to the navigable waters of Mission Bay provides opportunities for marine transportation and subsequent water soil disposal. Soil that requires offsite, ocean disposal could be loaded onto a barge directly from the RFAs, and hauled via water to nearby beaches or the LA-5 Ocean Dredged Material Disposal Site.

1.2.9 Cultural Resources

Opportunities with regard to cultural resources exist in the interpretation of Native American and historic land use in and around the ReWild MB Study Area. Without disclosing confidential information, informational and interpretive signage could draw attention to important features for visitors. Signage, which may include informational and interpretive signs, design elements, displays, kiosks or other exhibits, can provide visitors with more direct involvement with the natural and cultural resources as well as larger landscape by creating a relationship between the property and the visitors. Such displays can create for the visitors, relationships between natural and cultural resources, and highlight interesting events in prehistory and history that are not readily visible within the present landscape without interpretation. Beyond simply conveying information, signage programs can provide meaning to visitors, engaging them in the value of the appropriate management of the resources and property. Such signage programs might thematically relay information not only about the natural resources of Mission Bay and the Study Area, but also Native American land use in the local vicinity, connecting the known uses of plant and animal resources in the area with patterns of settlement in the broader San Diego area. Interpretations of the use of specific natural resources still present in Mission Bay can also provide visitors with a link to understanding Native American history and use of the landscape. Historical interpretation of the 19th and 20th century landscape changes, including the construction of Derby Dike and development of Mission Bay Park, could also be positive public education opportunities for both City residents and visitors. The future of the Study Area, including potential development of an appropriate signage program, also provides an opportunity to strengthen relationships with the Native American people directly associated with the area. As Mission Bay is part of the traditional territory of the Kumeyaay, engagement with Kumeyaay tribal representatives as part of the development of any proposed project activities and any signage program for the bay and Study Area offers an opportunity to engage with a key group of stakeholders whose interest in and association with the area is long-standing. While consultation with tribal representatives will be a required part of any necessary California Environmental Quality Act (CEQA) environmental review process, early and respectful engagement with tribal representatives will aid in the development of a project benefitting all San Diegans and Mission Bay visitors.

1.2.10 Public Access, Recreation and Education

Public access opportunities may increase the success and effectiveness of the project, ensure a sense of stewardship not just locally but also within greater San Diego. Opportunities may exist for additional wildlife-compatible recreational uses, along with the potential to add to or modify existing recreational facilities. The presence of Mission Bay High School adjacent to the project presents superb opportunities to enhance and collaborate with their Marine Sciences Magnet School programs, and those of the other schools in the cluster. The UC's KFMR is part of a state-wide program that has managed

and administered natural areas for the past 50 years. The KFMR was one of the earliest reserves to be founded under this program, and as such, there is a wealth of site-specific research data to draw upon for practical applications to wetlands restoration. There are also ample collaborative opportunities with the various, major universities in the area, which have used KFMR for classes and research for the past four decades.

Public Roads and Bikeways and Walkways

ReWild MB Study Area is currently served by a network of public roads which are contiguous with the northern borders of the RFAs. Primary access to the overall Study Area is controlled at two points at the extreme east and west of the area. There is no east-west vehicle connectivity across Rose Creek in the Study Area, and public access across Rose Creek is in the form of a pedestrian trail/bikeway bridge which connects Campland and De Anza SSA. This public access configuration which provides limited vehicle access while maintaining connectivity by a pedestrian trail/bikeway offers a great opportunity for protection for the restored wetland habitat against human disturbance. Concentrating land uses that require vehicular and infrastructure connections next to these exterior access points would provide an opportunity to expand the available area for contiguous habitat restoration in the Study Area.

The ReWild MB provides an opportunity to develop bikeways, walkways and trails that enhance the existing bike and trail systems in the community. There are several existing public access areas located next to the RFAs which provide an opportunity for a comprehensive interpretive trail system. These areas include the northeast part of the Study Area not within the RFAs, Mission Bay High School to the northwest, and Rose Creek trail. The ReWild MB public access can be designed to connect to and compliment these established areas and improve their educational potential and other beneficial uses. A comprehensive trail system can optimize connectivity with identified public use points, while protecting sensitive restored habitats. The through routes and primary loops of the public access alternatives can provide interpretive displays to educate recreational users, and to enhance public awareness of the restoration efforts. Public access trails may range in intensity of use and purpose of access, from quiet loop paths focused on passive recreation, to foot- and pedal-powered urban connectors as part of a walkable city strategy.

Watercraft and Restoration Access

Kayaks and stand up paddleboards offer a relatively low impact way to recreate in coastal wetlands. Expanded tidal slough networks in the restoration plan can create additional water trails large enough for these human-powered watercrafts, and include natural history interpretation as well as restrictions via signage (*e.g.,* seasonal limitations).

Fishing opportunities from such watercraft can be maintained and enhanced by habitat

restoration, in areas where the habitat resources allow. Tackle limitations and special regulations may be implemented. Alternatively, access planning provides an opportunity to focus fishing activities away from certain sensitive habitats toward less sensitive habitat areas.

Recreational Lodging

Camping and RV parks have traditionally been available to recreational users at Campland and within De Anza SSA. These uses provide the public with a low-cost opportunity to experience, recreate in, and enjoy natural areas, which may help foster environmental stewardship. There is an opportunity to continue providing this opportunity to the public and to generate revenue by allowing the continued use of some portion of the Study Area for this purpose, or relocating such uses to an adjacent location outside of the Study Area. There is also an opportunity to improve visual corridors to the Study Area by relocating recreational lodging areas to a location outside of the Study Area and/or set back from the water front, or by entirely removing such uses. Recreational lodging uses may be limited to a small area, set back from sensitive habitat areas, limited to tent camping and basic amenities (see Infrastructure subsection), and/or may be restricted during certain parts of the year (*e.g.,* nesting season for endangered bird species such as Belding's Savannah sparrow) to reduce the risk of impacting adjacent restored habitats. Revenue generated from recreational lodging uses may be used for restoration-related purposes such as maintenance activities.

Education and Research

Large-scale restoration projects benefit from having a well-informed public that is involved in appropriate aspects of restoration implementation, management and maintenance. Public access and interpretive design alternatives can provide opportunities for stewardship, and work with existing and new locations for staging stewardship activities. In some cases, existing buildings can be used to store restoration, adaptive management and maintenance equipment, and even provide space for stewardship group meetings. Existing structures provide an opportunity to be converted into a visitor or interpretive center within the Study Area, though there would be associated repurposing, staffing, and maintenance costs. There may be opportunities to use revenue-generating activities such as mitigation or carbon credit sales within the RFAs to help cover these costs.

Numerous educational entities, or entities with an educational component operate within the area and some already include portions of the RFAs as part of their research and education offerings. The faculty, especially science teachers, from the cluster of Mission Bay High School and its associated middle and elementary schools, has been using the existing KFMR for many years as a teaching and research site, and can provide input for interpretive and educational programming. The University of California, San Diego State University, Point Loma Nazarene University, and University of San Diego have a long-term research and

teaching presence in the KFMR/NWP. K-12 users currently include the local public school cluster as well as ODI, Francis Parker School High Tech Middle- and High-schools, as well as home-schooling groups. Non-profit organizations such as the Birch Aquarium and SEACAMP San Diego are representative of potential future educational constituents. The RFAs provide an ideal location for use as an outdoor classroom and a field research site. Faculty and student researchers from local universities and research institutions may conduct ecological monitoring and other research projects; these efforts may provide key data to aid in assessing and managing restored habitats and to quantify the restoration success. As an example, a similar ongoing research project was developed by San Diego State University at the Tijuana Estuary. With identification of project need, potential funding sources, and an appropriate facility operator or host organization, the RFAs provide the opportunity for the establishment of an *in situ* estuarine research and interpretive center. Nearby examples include the Living Coast Discovery Center, located in the San Diego National Wildlife Refuge and the Tijuana Estuary Visitor Center. The Study Area planning process offers the opportunity to embed sampling locations, water intakes, aquaria, etc. during restoration construction, thereby minimizing disturbances typically caused when such elements are introduced to an existing ecosystem.

1.2.11 Infrastructure

The density of structures and facilities varies in the Study Area. At the KFMR/NWP, there is a small trailer with plumbing, sewer, and internet amenities that is used as the research field station for the KFMR. At Campland, there are campground and boat storage facilities including pavement, camping utilities (*e.g.,* electricity, cable, internet, water supply outlets and waste water collectors), playground and sports facilities, bathrooms, and management buildings. The De Anza SSA is paved and equipped with residential trailer home facilities. No major utility lines pass through the RFAs, and there are several two-story structures and buildings. Restoring the Study Area will provide the opportunity to increase or otherwise enhance the buffer space between human activities and habitat areas at the KFMR/NWP. While infrastructure removal is needed for wetland restoration at Campland and De Anza SSA, opportunities exist to increase open space, natural habitat, and site aesthetics without major structural demolition costs as well as minimum impact and disruption to adjacent properties. Some of the existing infrastructure, such as building pads, may be reused or repurposed to enhance public uses (*e.g.,* kiosks, research or visitor centers).

The Study Area is served by a network of roads and highways which connects to Interstate 5 about two miles from the Study Area. This existing road infrastructure provides fast and easy site access for restoration activities such as construction, maintenance, operation, monitoring. Mid-Coast Trolley stations along Morena Boulevard at Clairemont Drive and Balboa Avenue are under construction, and are anticipated to be principal gateways for visitors to reach Mission Bay Park from other areas of San Diego. More discussion of opportunities related to public access is provided in the previous Section 1.2.10.

1.2.12 Legal, Political and Regulatory Environment

The land ownership, uses, and administration are discussed in Section 1.2.1. Due to the nature of the project and the various agencies involved, including the City and State, the potential for agency coordination, cooperation, and involvement is high. Agency coordination will help ensure that a wider range of both data and opinions are considered, restoration alternatives are more thoroughly vetted, and opportunities for cost efficiencies and funding may be identified and implemented. An overview of the regulatory requirements that may be required for the implementation of ReWild MB is included in Appendix A.

1.3 CONSTRAINTS

This section discusses the identified constraints that may affect restoration, arise as a result of restoration-related activities, and help to define and evaluate the feasibility of potential restoration alternatives. Constraints discussed in this section focus on the RFAs but include considerations for the overall Study Area.

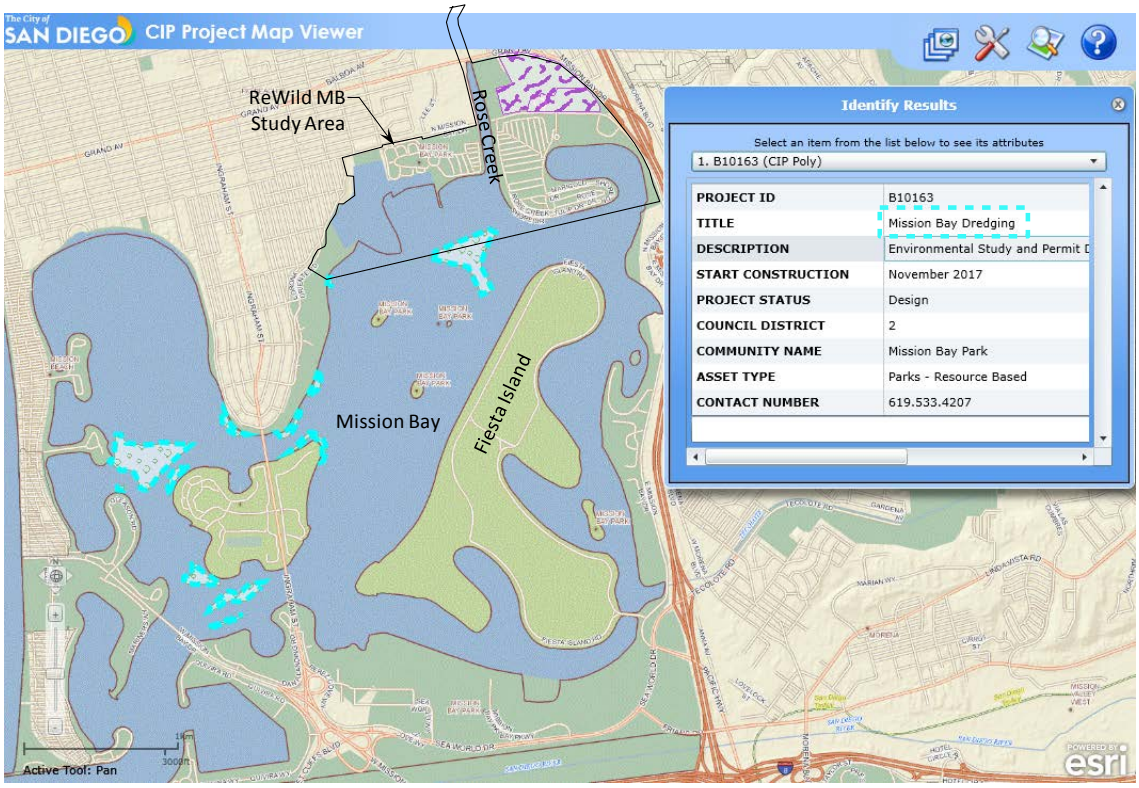
1.3.1 Ownership & Land Use

As mentioned in Section 1.2.1, the City owns the majority of the Study Area, with the KFMR owned by the UC. ReWild MB would require coordination and negotiation with the City and UC so that the restoration project is acceptable to these land owners and administrators. While the MBPMP calls for habitat restoration at Campland and De Anza SSA, it does not preclude planning for other development such as recreational uses. This represents a potential constraint in that it could limit the footprint of land available for restoration if other uses were developed in these RFAs.

Current leases and vending agreements provide revenue to the City, and elimination of these sources represents a potential constraint. Input from the City obtained through the De Anza Special Use Study may provide revenue generation in more concentrated, less sensitive areas or along perimeter locations, thereby offsetting such revenue reductions. A range of alternatives might explore more or less aggressive approaches to integrating small footprint revenue sources to offset the revenue currently provided by the low-density/large footprint programs on site.

The Study Area is in close proximity to the Mission Bay High School and residential developments. These uses pose constraints to the extent of wetland restoration and require consideration of buffer zones between the restored wetlands and these other land uses. The recently installed floodlights and the artificial turf on the athletic field at the Mission Bay High School may pose adverse environmental impact to the wildlife habitat in the proposed wetland restoration.

Mission Bay is dredged by the City to remove sediment accumulation to maintain navigation safety. Figure 3 shows the dredging locations (outlined in cyan) proposed in the City's Capital Improvements Program (City of San Diego 2016). One of the larger areas programmed for maintenance dredging is located midway between the mouth of Rose Creek and Fiesta Island (Figure 3). A small dredging location is also found near Stribley Marsh at the south-western tip of the Study Area. Wetland restoration near these maintenance dredging locations would be constrained by the potential environmental impacts to wildlife habitat caused by temporary impacts to noise, air, and water quality during construction as well as long-term disturbance to wildlife habitats.



Source: City of San Diego (2016)

Figure 3. City Proposed Maintenance Dredging in Mission Bay

1.3.2 Topography

Existing elevations of areas within Campland, De Anza SSA, and the overall Study Area that are set back from the shoreline are not low enough to support wetlands habitat under current MSL conditions and are, therefore, constrained by the grading necessary for restoration of wetlands habitat. Aside from areas bordering the shoreline, elevations at Campland and De Anza SSA range from approximately 8 to 20 ft, NAVD88 and 8 to 16 ft, NAVD88, respectively (see Figure 2). This topography is higher than the habitat elevation ranges provided in Table

1, indicating that the amount of grading and soil removal required for wetland restoration may be large. The need of fill would likely be small, thus creating a potential constraint of unbalanced earthwork (*i.e.,* larger cut volume than fill volume) that could require costly export of large excavated material volumes. Consequently, the extent and/or types of habitat to be restored may be constrained by the cost of such options.

1.3.3 Sea-Level Rise

SLR will cause tidal inundation of existing upland areas in the future, especially during extremely high tides such as King Tides. Incorporating SLR into wetland restoration may necessitate habitat migration planning. In cases where there is no room to accommodate for upslope transgression of bay waters, intertidal habitats will be lost. SLR will change the size and extent of the various habitats, and likely, the relative proportion of each habitat type. In turn, the balance of resident plant and wildlife populations, and overall ecosystem may be affected. Without wetland migration planning and associated grading, SLR and the steepness of the existing topography may limit habitats to narrow bands. Narrow habitat bands are not likely to provide as much ecological value. The constraints of planning for SLR and utilizing wetland migration include the need to wait for planned wetland habitats to develop, uncertainty in the degree of change that will occur at the RFAs due to the effects of SLR over time, and uncertainty regarding the restoration results to be expected for the future.

The effects of SLR must be considered with respect to topography in the overall Study Area, as SLR may cause changes to existing and/or restored habitats (*e.g.,* upslope wetlands habitat migration). At the KFMR/NWP, where elevations are low and salt marsh habitat currently dominates, the effects of SLR may be particularly prominent, resulting in conversion of salt marsh habitat to mudflat and subtidal habitats.

Areas to be considered for wetland-compatible public access/recreation that are subject to SLR encroachment and flood risk need to be designed with these constraints in mind. For example, public access/recreation areas may need to be located upslope of the current MSL by a distance that accommodates projected SLR. Alternatively, these areas could be used for uses/activities that are compatible with intermittent flooding.

1.3.4 Biology/Ecology

There are few ecological constraints associated with restoration of wetlands at Campland and De Anza SSA, as both currently are of very low ecological value. Restoration of regionally rare wetland habitats would be many times more valuable, on an acre-to-acre basis, than the existing paved areas and ornamental landscaping. Buffer zones may be required for insulating areas planned for restoration from surrounding urban areas outside the Study Area, as the northern borders of Campland, and northern and eastern borders of

De Anza SSA are located next to urban developments. Use of buffer zones would constrain the extent of habitat restoration and reduce the overall footprint of the restored area.

At the KFMR/NWP, there is potential for restoration-related impact to existing habitat and species. Existing habitat and species at the KFMR/NWP are not currently subject to substantial disturbance from human activities, and must be protected during and after restoration. Restoration activities may be constrained to usage of methods and schedules that minimize disturbance to the existing habitat and species. Potential impacts and disturbances may result from habitat enhancement within the KFMR/NWP itself and/or habitat restoration at Campland, located adjacent to KFMR/NWP.

Landforms and topography may constrain the ability to achieve full connectivity of wetland habitats at the RFAs. For example, the Study Area is divided by Rose Creek and currently includes a few areas of higher elevation, which may not be optimal for wetland habitat restoration due to potentially high cut and soil disposal costs that would be incurred. Although other types of habitat suited to higher elevation ranges may be restored in such areas, the different varieties of potential plant and wildlife populations may be constrained to the elevation ranges of the restored habitat types in which they naturally thrive. Limited connectivity of habitats at the RFAs may also constrain the biodiversity and health of the food webs within those habitats, and it is often impossible or implausible to re-introduce organisms that no longer exist.

Parts of the RFAs that are included on the Section 303(d) list of impaired waters may be subject to water quality contaminant levels that could affect beneficial habitat uses (*e.g.,* estuarine habitat; wildlife habitat; rare, threatened, or endangered species habitats). Such areas may require special consideration and be constrained by applicable regulations regarding water quality interactions with plants and wildlife.

There are few ecological constraints associated with realignment of Rose Creek to newly restored areas of Campland and De Anza SSA given their low ecological value. However, realignment of all or a portion of Rose Creek into the existing KFMR/NWP may result in impacts to existing habitats from scour and deposition and may impact habitats occupied by sensitive species, such as the light-footed Ridgway's rail and Belding's savannah sparrow. Consequently, such realignment is constrained by the uncertainty of the outcome and severity of potential impacts, and should be carefully considered.

1.3.5 Hydrology

Wetland restoration may be constrained by the existing and potential effects of the hydrology at the RFAs, which are dictated primarily by topography, bathymetry, tides, fluvial inputs, and local runoff. Restoration efforts should take into consideration the changes and impacts on localized flow velocities and directions, and sedimentation and erosion patterns resulting

from restoration. In addition, fresh water input from Rose Creek may affect wetland restoration, depending on the amount of fresh water and/or associated sedimentation.

Rerouting all or a part of Rose Creek through KFMR/NWP, along or near its original historical path, may impact habitats currently occupied by sensitive species, thereby requiring restoration of additional areas as mitigation, and causing other impacts due to scour and deposition. Rerouting all or part of Rose Creek away from its existing location would reduce fresh water inputs to the Campland and De Anza SSA RFAs, thereby affecting the feasibility of restoring habitat types that require fresh or brackish water. Rerouting Rose Creek also presents a constraint associated with a higher uncertainty of inundation prediction as the creek could migrate to a less desirable, unplanned course. Controlled boundaries (*e.g.,* upland berm) may be considered as part of the restoration to protect human development from creek migration.

There are no known constraints associated with the fluvial input from Tecolote Creek, as the amount and influence of fresh water input to the RFAs is negligible. Wetland restoration may be constrained by the planned vector remediation at the Noyes Street storm drain outfall, specifically due to the location of the Noyes Street and Olney Street storm drain outfalls within the KFMR/NWP RFA and the human disturbance that would result from such remediation efforts. Proposed plans to run a channel through the KFMR/NWP could impact plant and wildlife populations within existing and potential future wetlands, and could divide or potentially isolate habitat areas, and potentially constrain the ecological function of the affected areas.

1.3.6 Water Quality

As stated in the Existing Conditions Report, the mouth of Rose Creek is Section 303(d) listed for eutrophication and lead for an impacted area of 9.2 acres, with 13 miles of Rose Creek also listed as impaired for selenium and toxicity (AMEC 2015). These water quality impairments may pose a constraint to the quality of restored wetlands in the Study Area if mixing and tidal exchange in the surrounding areas are inadequate.

Water quality in the Study Area is currently affected by human uses, such as Campland, where no BMPs for on-site run-off where observed during site observations conducted in May 2016. It would be a constraint if similar uses are allowed to continue within or near the RFAs, as these human activities would contribute pollutants to restored wetlands, existing wetlands, and Mission Bay.

Construction activities for ReWild MB may result in a temporary constraint due to an increase in water pollution, turbidity, and disturbance of nearby habitats during construction processes such as demolition and grading operations. Though minimal infrastructure exists within the RFAs, construction and associated activities would have to be constrained to those methods

that minimize water quality and turbidity impacts to sensitive habitats, such as the use of BMPs.

1.3.7 Flood Risk Reduction

While tidal and fluvial flows are beneficial to the restored wetlands, the ReWild MB has the constraint of not exacerbating the flood risk to human development in the project vicinity. Restoration activities with the potential to impact flood risk must be assessed and modified accordingly or mitigated, if necessary. Examples of such activities include topographic/bathymetric changes associated with grading, dredging, and rerouting of Rose Creek. A site-specific analysis of tidal inundation and creek flooding would be necessary as part of the restoration alternative development process.

1.3.8 Soil Disposal

Disposal of soil excavated to restore and enhance wetlands presents a potential constraint to be addressed as part of the restoration alternative development process. Both the quantity and quality of the soil must be considered in developing the restoration alternatives. Wetlands restoration at Campland and De Anza SSA would require grading, which would likely produce large soil volumes. Clean sandy soil removed from the site can be beneficially use for beach nourishment. If the soil excavated during restoration at these two RFAs is not suitable for reuse, proper disposal will be required. Excavated material that is contaminated would not be suitable for direct reuse and may require soil amendments or other treatment (*e.g.,* physical, chemical, biological) to support successful revegetation of desired plant communities.

Soil that is heavily contaminated or otherwise unusable will require off-site disposal, such as ocean disposal. Soil that does not meet the requirements for ocean dredged material disposal must be trucked and/or taken by rail to an appropriate landfill or other disposal site. It is anticipated that constraints associated with soil disposal can be addressed from technical and environmental standpoints. However, high costs associated with some soil disposal options (*e.g.,* offsite disposal) might limit the economic feasibility of some restoration alternatives.

1.3.9 Cultural Resources

Due to the historical use of the Study Area by Native Americans and the archaeological sensitivity of the area, as discussed in the Existing Conditions Report, the Native American Heritage Commission should be contacted early in the planning stages to perform a Sacred Lands File Search. If an environmental document is required for the restoration effort, the CEQA lead agency will be required to undertake formal lead agency-to-tribal government consultation under new Public Resource Code Sections 21080.3.1 et seq. Cultural resources constraints, outside of previously documented resources discussed in the Existing

Conditions Report, may include resources over 45 years of age within areas that have not been formally evaluated for inclusion on the California Register of Historical Resources or the City's Historical Resources Register, and which would require avoidance plans or assessments of eligibility and potentially data recovery or other mitigation. If any Native American human remains are identified as part of the restoration effort, such remains would be considered significant under CEQA and treated in accordance with Public Resources Code (PRC) Section 5097.98. While neither ReWild MB nor any proposed activities currently have a federal nexus through federal funding or permitting, any future federal involvement would trigger compliance requirements during both permitting and implementation under Section 106 of the National Historic Preservation Act, with respect to cultural resources and the Native American Graves Protection and Repatriation Act, regarding Native American remains and associated burial items.

The Campland and De Anza Point land areas have both been in existence for 45 to 50 years and may require formal documentation and eligibility evaluation to assess any direct or indirect impacts posed by ReWild MB. Finally, the construction of Mission Bay Park was an engineering feat accomplished by the City during the formative years of the modern city so thinking about Mission Bay Park as a cultural landscape may be worth considering as part of the planning process to address such a "designation."

1.3.10 Public Access, Recreation, and Education

While the current limited entries to the site are an opportunity for controlling the public access and land use programs on site, they also constrain the extent to which the public can reach the site. Existing public transit stops are located at the extreme perimeter of the site, and only two provide indirect access to the Study Area, a bus stop at the Mission Bay High School athletic fields, which adjoin the Rose Creek trail, which connects to the Study Area, and a transit stop at the far eastern edge of De Anza Park. Additional Mid-Coast Trolley stations are under construction, including two stations adjacent to the Study Area that are located along Morena Boulevard — one at Clairemont Drive and another at Balboa Avenue.

Any public access/uses within the RFAs would need to be wildlife-compatible. The desire to protect restored habitats needs to be balanced against the stewardship-building opportunity of meaningful public interaction and education with these habitats. Establishing a formal trail system and interpretive center would take up space which could otherwise be restored for wetland habitats. The proximity of human activities would be a constraint that causes impacts to habitat and associated wildlife. New and existing public access trails and nodes may require protection by fences and/or upland areas in order to limit the impacts within core habitat areas. Additionally, establishing a formal trail system could raise concerns from local residents regarding potential impacts to surrounding neighborhoods and public uses such as increased noise, litter, and crime, or degraded views. The spatial organization and seasonal scheduling of access types within the public use areas is a critical consideration.

Urban wildlands with thick vegetation and significant cover are sometimes attractive to vagrants and homeless encampments. Public access alternatives can be designed with features to address this social condition such as reductions of access ways near tall upland vegetation, location of appropriate barriers, and maintenance of visual access to areas that could support encampments.

1.3.11 Infrastructure

The KFMR/NWP does not have any constraints associated with infrastructure. On the other hand, the structures and facilities in Campland and De Anza SSA would be a constraint on wetland restoration, since this infrastructure would have to be demolished if the area is to be restored to wetland. Although infrastructure removal is not anticipated to represent a significant constraint and would not cause disruption (*e.g.,* utility supplies), it would increase project construction costs and cause temporary disturbance to adjacent properties. The Mission Bay High School just north of the Study Area would need to be protected from potentially elevated noise and air pollution during restoration construction.

1.3.12 Legal, Political, and Regulatory Environment

Various approvals and permits would be required for implementation of the ReWild MB. The potential regulatory requirements for project implementation are discussed in Appendix A. Compliance with existing regulations, plans, and programs is required such that project schedule and budget for these components should be considered during the restoration planning and implementation process (*e.g.,* permitting and environmental review). At this point in project planning, the ultimate project proponent and specific agency involvement for CEQA and National Environmental Policy Act (NEPA) is unknown so it is worth noting that specific regulatory requirements for ReWild MB will ultimately depend on the proposed project developed for implementation and what agencies lead the CEQA and NEPA processes.

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APPENDIX A

REGULATORY OVERVIEW

REGULATORY OVERVIEW

Various approvals and permits would be required for implementation of the ReWild MB. The table below identifies potential regulatory requirements for project implementation. This list is preliminary and would require further design information, as well as agency coordination to confirm specific needs. Policies and regulations that require additional information or further confirmation of needs are also discussed following the table. The general anticipated process needed to meet requirements is also described.

Potential Required Project Approvals and Permits

AGENCY	PERMIT/APPROVAL
Federal	
U.S. Army Corps of Engineers (Corps)	• U.S. Department of the Army (DA) Permit under Section 404 of the CWA, 33 United States Code (USC) Section 1344 • DA Permit under Section 10 of the Rivers and Harbors Act of 1899, 33 USC Section 403 • DA Permit under Section 103 of the Marine Protection, Research, and Sanctuaries Act, 33 USC Section 1413 • Coordination under the Fish and Wildlife Coordination Act, 16 USC Sections 661–666
National Marine Fisheries Service (NMFS)	• Consultation with the NEPA lead agency pursuant to Magnuson-Stevens Fishery Conservation and Management Act, as amended 1996 (Public Law 104-267); • Consultation with the Corps under Section 7 of the Federal Endangered Species Act (FESA), 16 USC Sections 1531–1544, and issuance of a Biological Opinion (BO), if required • Coordination under the Fish and Wildlife Coordination Act (16 USC 661-667)
State Historic Preservation Officer/Tribal Historic Preservation Officer	• Consultation with the NEPA lead agency under Section 106 of the National Historic Preservation Act of 1966 (36 Code of Federal Regulations Part 800)
U.S. Fish and Wildlife Service (USFWS)	• Consultation with the NEPA lead agency under Section 7 of the FESA, 16 USC Sections 1531–1544, and issuance of a BO • Coordination under the Fish and Wildlife Coordination Act (16 USC 661-667
Federal Emergency Management Agency (FEMA)	• Approval of Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR)

AGENCY	PERMIT/APPROVAL
State	
California Coastal Commission (CCC)	• Coastal Development Permit (CDP) • Consistency Certification, Section 30600(a) of the California Coastal Act, or Waiver of Federal Consistency Provisions, if required
California Department of Fish and Wildlife (CDFW)	• Streambed Alteration Agreement (SAA), Section 1601 of the California Fish and Game Code • California Endangered Species Act (CESA) Section 2081 Incidental Take Permit • Coordination under the Fish and Wildlife Coordination Act (16 USC 661-667
Regional Water Quality Control Board	• Water Quality Certification under Section 401 of the CWA
State Lands Commission	• Lease for access
State Mining and Geology Board	• Surface Mining and Reclamation Action exemption
Regional/Local	
City of San Diego (City)	• Issue Site Development Permit • Local Coastal Plan (LCP) coastal development permit, unless Consolidated CDP is requested • Noise variance or exemption letter • Compliance with stormwater regulations

Regulations

Some of the regulations identified above may not be required depending on the ultimate project alternatives and construction approach. The discussion below provides some additional information regarding potential uncertainties and alternative components that may influence applicability of specific regulations. The discussion is alphabetical to facilitate review by the reader.

California Environmental Quality Act

The CEQA is a California statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies, defined as a "project". The lead agency under CEQA must have the authority to provide some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval). The environmental review required imposes both procedural and

substantive requirements. Depending on the potential effects, an initial review of the project, and issuance of an exemption or Negative Declaration may be sufficient under CEQA. However, further, more substantial, review may be conducted in the form of a Mitigated Negative Declaration or Environmental Impact Report (EIR), if there are potential significant environmental effects.

Prior to permit approvals for ReWild MB, a CEQA document must be prepared and approved/certified by a lead agency. This process documents the lead agency's compliance with the requirements of CEQA. The lead agency responsible for approving the Mitigated Negative Declaration or certifying the Final EIR, has yet to be identified. Certification of an EIR also includes issuance of Findings and a Statement of Overriding Considerations, as required, as well as filing of the Notice of Determination.

California Coastal Act

The CCC was established in 1972 by voter initiative via Proposition 20. The California Coastal Act of 1976 tasked the agency with protection of coastal resources. The state authority controls construction along the state's 1,100 miles of shoreline through the issuance of Coastal Development Permits (CDPs). The CCC assists local governments in implementing local coastal planning and regulatory powers. Under the Act, local governments are encouraged to adopt LCPs within their jurisdictions. The LCP consists of a Land Use Plan with goals and regulatory policies as well as a set of Implementing Ordinances. Some areas of the coastal zone are delegated to the City through the LCP, while other areas remain under original CCC jurisdiction or are in areas where permitting authority has been retained by the CCC (*e.g.,* historical tidelands). The City has an approved LCP that encompasses the ReWild MB Study Area. Portions of the Study Area are located within original or retained jurisdiction and not addressed by the local LCP. There are also some areas of deferred certification that remain under CCC jurisdiction until they have been certified by the City for local permitting authority.

As a result of original and retained jurisdiction, as well as deferred certification areas, the Study Area spans both CCC and City jurisdiction. Portions of the site addressed under the LCP include areas of appeal jurisdiction, where the City has jurisdiction but permits can be appealed by or to the CCC. ReWild MB therefore represents a split jurisdiction project. In such a case there are two options: 1) obtain CDPs from both the City and CCC, or 2) obtain a consolidated CDP from the CCC. The consolidated permit approach requires a request letter from the City stating that they are aware they share jurisdiction, but defer to the CCC for the permitting process. It is anticipated that the City would request the CCC issue a consolidated CDP for ReWild MB (Llerandi, personal communication, 2016), although this has not yet been confirmed.

Several sections of the California Coastal Act focus on shoreline construction, specifically Sections 30235, 30233, and 30706. Construction is typically allowed through revetments, breakwaters, groins, or other means that alter natural shoreline processes; dredging of open coastal waters, lakes, wetlands, and other areas will be permitted only where less feasible environmentally damaging alternatives are not available. In particular, in Section 30233, dredging and spoils disposal, planned to avoid significant disruption to marine and wildlife habitats and water circulation, is allowed for restoration purposes. Section 30233 states further that dredge spoils suitable for beach replenishment should be transported to appropriate beaches or into suitable longshore current systems.

After completion of the CEQA process, the CCC (and City, as required) would determine whether to approve a CDP for ReWild MB. It is anticipated the CCC would approve a consolidated CDP addressing the project as a whole; it is possible that the project could obtain a permit from the CCC for work within state jurisdiction, and an individual permit from the City for work within the local permit authority area. If dredged materials are anticipated to be suitable for placement on beaches or in the nearshore, additional permitting may be required depending on the jurisdiction proposed for placement.

California Fish and Game Code

Sections 1600-1616

Under Sections 1601–1603 of the Fish and Game Code, agencies are required to notify California Department of Fish And Wildlife (CDFW) prior to implementing any project that would divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake.

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that support wildlife resources are subject to regulation by CDFW under Fish and Game Code Section 1602. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- Substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The Fish and Game Commission defines “stream” as a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW’s jurisdiction within altered or

artificial waterways is based on the value of those waterways to fish and wildlife. In practice, CDFW typically extends its jurisdictional limit to the top of a stream, the bank of a lake, or outer edge of the riparian vegetation, whichever is wider. Jurisdictional boundaries under Fish and Game Code Sections 1600–1616 (CDFW's Lake and Streambed Alteration Program) may encompass an area that is different than that under the jurisdiction of CWA Section 404. Therefore, jurisdictional waters of the state include jurisdictional waters of the United States (U.S.); federal and state jurisdictions do overlap, but would remain distinct for regulatory administration and permitting purposes. A CDFW Streambed Alteration Agreement (SAA) must be obtained for any project that would result in an impact on a river, stream, or lake. The majority of the project Study Area is tidally influenced bay, and would not require a SAA (Fisher, personal communication, 2016). Areas within the Rose Creek portion of the Study Area may qualify as a stream, and therefore, require an SAA.

Prior to implementation of ReWild MB, CDFW would determine whether a Section 1602 SAA is required for implementation of the project.

Section 2050 et seq.

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et seq.) prohibits the "take" (defined as "to hunt, pursue, catch, capture, or kill") of state-listed species except as otherwise provided in state law. CESA applies incidental take prohibitions to state-listed species, as well as species currently petitioned for state-listing status (*i.e.*, candidate species). State lead agencies are required to consult with CDFW to ensure that their authorized actions are not likely to jeopardize the continued existence of any state-listed species or result in the degradation of occupied habitat.

Sections 2080.1 and 2081 of the Fish and Game Code regulate the "take" of endangered, threatened, and candidate species under CESA by authorizing take under certain circumstances. As described below, such authorization may be in the form of a "consistency determination" for species listed under both the Federal Endangered Species Act (FESA) and the CESA (under Section 2080.1), or an "incidental take permit" (under Section 2081(b) and (c)).

Fish and Game Code Section 2080.1 allows an applicant who has obtained a federal incidental take statement as part of a Biological Opinion (BO) pursuant to a FESA Section 7 consultation or an incidental take permit under FESA Section 10(a) to notify the CDFW Director in writing that the applicant has been issued an incidental take statement or permit pursuant to the FESA and submit a copy of the federal incidental take statement or permit to the CDFW Director. The Director then has 30 days to determine whether the incidental take statement or permit is "consistent" with the CESA in the form of a written "consistency determination." If the Director determines that the incidental take statement or permit is

consistent with the CESA, the applicant does not need to obtain separate take authorization from the CDFW.

Consistency determinations apply only in those situations where the affected species is listed under both the FESA and the CESA. If the species is listed under the CESA only, an applicant must obtain an incidental take permit under Fish and Game Code Section 2081(b) and (c).

Under Section 2081, CDFW authorizes "take" of state-listed endangered, threatened, or candidate species through incidental take permits or memoranda of understanding if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in questions, and (4) the applicant ensures suitable funding to implement the measures required by CDFW.

Prior to implementation of ReWild MB, formal consultation with CDFW would need to be completed in accordance with Section 2081 to obtain a consistency determination and/or Incidental Take Permit, if potential impacts to state-listed species could occur.

California State Lands Commission Public Trust Doctrine

The California State Lands Commission (SLC) has exclusive jurisdiction over all of California's tide and submerged lands and the beds of naturally navigable rivers and lakes, which lands are sovereign lands, and swamp and overflow lands and State School Lands (proprietary lands). The SLC has statutory authority (Division 6 of the California Resources Code) to approve appropriate uses of state lands under its jurisdiction and is the administrator of the Public Trust Doctrine over sovereign lands. Some areas have been granted to other parties, including some lands in the project area that were granted to the City as Pueblo Lands and are potentially outside the jurisdiction of the State Lands Commission, depending on the proposed use of the lands.

Sovereign lands may only be used for purposes consistent with this public trust; uses include commerce, navigation, fisheries, open space, wetlands, and other related trust uses. The SLC has an oversight responsibility for tide and submerged lands legislatively granted in trust to local jurisdictions (PRC Section 6301), extending to activities within submerged lands (from mean high tide line) and those within 3 nautical miles offshore.

After completion of the CEQA process, the SLC would determine whether to issue a lease for activities below the mean high tide line associated with implementation of ReWild MB, including dredging and materials disposal/reuse of excavated materials. Coordination with SLC to identify whether lands within the Study Area are exclusively Pueblo Lands and potentially outside of their jurisdiction would occur prior to issuance of a lease.

Clean Water Act

The principal law that serves to protect the nation's waters is the CWA, formally known as the Federal Water Pollution Control Act, which was originally enacted in 1948. The 1972 amendments established two fundamental, national goals: eliminate the discharge of pollutants into the nation's waters and achieve water quality that is both "fishable" and "swimmable." The amendments also prohibited the discharge of any pollutant to "waters of the U.S." from any point source (*e.g.*, a discharge pipe) unless the discharge was authorized by a National Pollutant Discharge Elimination System (NPDES) Permit. CWA Section 402 sets forth regulations that prohibit the discharge of pollutants into waters of the U.S. from any point source without first obtaining a NPDES Permit.

CWA Section 303 requires states to adopt water quality standards for all surface waters of the U.S. Under CWA Section 303(d), states, territories, and authorized tribes are required to develop a list of water bodies that are considered to be "impaired" from a water quality standpoint and develop action plans, referred to as Total Maximum Daily Loads, to improve water quality.

Relative to water quality protection and management for ReWild MB, several sections of the CWA are relevant:

- Section 303(d) – Total Maximum Daily Loads
- Section 401 – Water Quality Certification
- Section 402 – NPDES Program – Municipal Permit
- Section 404 – Discharge of Dredged and/or Fill Material.

The Study Area is Section 303(d) listed as impaired for various pollutants:

Rose Creek impairments include selenium and toxicity (SWRCB 2015), extending along 13 miles of the creek. The mouth of Rose Creek, at Mission Bay, is also listed for eutrophication and lead for an impacted area of 9.2 acres (AMEC 2015). Rose Creek is also impaired for warm freshwater habitat use due to selenium and toxicity. Additionally, the mouth of Rose Creek is impaired for marine habitat use due to lead and potential eutrophic conditions.

Section 303(d) listed pollutants within Mission Bay include copper, enterococcus, fecal coliform, total coliform, eutrophication, and lead (SWRCB 2015). Water quality has been found to vary throughout Mission Bay, with contamination decreasing with increasing distance from major sources of freshwater input (Stockwell et al. 1977).

Both Campland and De Anza Cove shorelines are 303(d) listed for enterococcus, fecal coliform, and total coliform (indicator bacteria) (SWRCB 2015). The extent of impacted shoreline areas for indicator bacteria pollutants in Campland and De Anza Cove are 0.08 miles and 0.06 miles, respectively (AMEC 2015). Both the shorelines are impaired for water contact recreation use and shellfish harvesting use due to indicator bacteria.

After completion of the CEQA process, the Regional Water Quality Control Board would determine whether to issue a State Water Quality Certification in accordance with CWA Section 401, in connection with the Corps' DA permits for the discharge of dredged and/or fill material.

After completion of the CEQA process and issuance of agency permits, the Corps would determine whether to issue a DA permit pursuant to Section 404 of the CWA (33 United States Code [USC] Section 1344).

Coastal Zone Management Act

In 1972, U.S. Congress passed the Coastal Zone Management Act to manage the nation's coastal resources. Its goal is to preserve, protect, develop, and, where possible, restore or enhance the resources of the nation's coastal zone. Federal activities within or affecting the coastal zone must be consistent with the state's coastal management program to the maximum extent practicable.

If a local CDP is issued by the City, ReWild MB would require a consistency determination from the CCC, prior to completion of the NEPA process. If the CCC issues a consolidated CDP for ReWild MB, a waiver of consistency would be requested.

Federal Endangered Species Act

The FESA of 1973 (16 USC Sections 1531 et seq.) directs the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to identify and protect endangered and threatened species and their critical habitat, and to provide a means to conserve their ecosystems. Section 9 of the FESA makes it unlawful for a person to take a listed animal without a permit.

Section 7 of the FESA directs the USFWS and NMFS to conserve threatened and endangered species and, in consultation with federal agencies, ensure that any action authorized, funded, or carried out by such agency does not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Section 7(a)(2) requires federal agencies to consult with the USFWS and NMFS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species. In consultation for those species with critical habitat,

federal actions must also ensure that activities do not adversely modify critical habitat to the point that it would no longer aid in the species' recovery.

Prior to the completion of the NEPA process, the NEPA lead agency would initiate and complete formal consultation with the USFWS and NMFS in accordance with 16 USC Sections 661–666, as needed. Formal consultation may not be required if no impacts to threatened or endangered species would occur. If the project is in compliance with the Multi Species Conservation Plan, consultation may also be unnecessary unless impacts to covered species would occur within Corps jurisdiction.

Federal Emergency Management Agency – Conditional Letter of Map Revision and Letter of Map Revision

Executive Order 11988 directs federal agencies to avoid, to the extent practicable and feasible, short-term and long-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain development wherever a practicable alternative exists. Furthermore, Executive Order 11988 requires the prevention of uneconomic, hazardous, or incompatible use of floodplains; protection and preservation of natural and beneficial floodplain values; and consistency with the standards and criteria of the National Flood Insurance Program (NFIP). The basic tools for regulating construction in potentially hazardous floodplain areas are local zoning techniques and Federal Emergency Management Agency (FEMA) floodplain mapping. The Federal Insurance Rate Map is the official map created and distributed by FEMA and NFIP that delineates Special Flood Hazard Areas—areas that are subject to inundation by a base flood—for every county and community that participates in the NFIP.

For projects that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source, and thus would result in the modification of the existing regulatory floodway, effective Base Flood Elevations, or an Special Flood Hazard Area, a Conditional Letter of Map Revision (CLOMR) could be necessary. A CLOMR is FEMA's comment on a proposed project that would make such hydrologic modifications. A Letter of Map Revision (LOMR) is FEMA's modification to an effective Federal Insurance Rate Map based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway.

Depending on the effects of ReWild MB on floodplain levels within Mission Bay and Rose Creek, a CLOMR and LOMR could be required for approval by FEMA before beginning any project construction activities.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act directs the Department of the Interior to provide assistance to and foster cooperation between federal agencies and the state's wildlife

agency to promote wildlife conservation in water resource development programs. The federal lead agency for the project must consult with the USFWS, NMFS, and the state's wildlife agency for activities that affect, control, or modify jurisdictional waters, and associated wildlife conservation measures to be implemented during construction and maintenance of the project.

Prior to the issuance of federal permits, the federal permitting agency would initiate and complete consultation with the USFWS, NMFS, and CDFW in accordance with the Fish and Wildlife Coordination Act, as needed. Recommendations made by the consulting agencies will be incorporated into the project where possible as part of permit conditions.

Magnuson-Stevens Fishery Management and Conservation Act, as amended 1996 (Public Law 104-267)

Federal agencies must consult with NMFS on actions that may adversely affect Essential Fish Habitat (EFH), which is defined as those "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH assessments must include (1) a description of the proposed action, (2) an analysis of effects, including cumulative effects, (3) the federal agency's views regarding the effects of the action on EFH, and (4) proposed mitigation, if applicable.

Waters within Mission Bay may be considered EFH by NMFS, although this has not been confirmed. If EFH is identified within the project area, prior to completion of the NEPA process, the NEPA lead agency would consult with NMFS.

Marine Protection, Research, and Sanctuaries Act

In 1972, Congress enacted the Marine Protection, Research, and Sanctuaries Act (MPRSA) (also known as the Ocean Dumping Act) to prohibit the dumping of material into the ocean that would unreasonably degrade or endanger human health or the marine environment. MPRSA regulates the ocean dumping of all material beyond the territorial limit (three miles from shore) and prevents or strictly limits dumping material that "would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities." Virtually all material ocean dumped today is dredged material (sediments) removed from the bottom of waterbodies in order to maintain navigation channels and berthing areas. Ocean dumping cannot occur unless a permit is issued under the MPRSA. Section 103 of MPRSA authorizes the Corps to issue permits, subject to U.S. Environmental Protection Agency approval, for transport and disposal of dredged material (*i.e.*, material excavated from navigable U.S. waters) at designated ocean disposal sites (*e.g.*, LA-5 Ocean Dredged Material Disposal Site). For other materials, U.S. Environmental Protection Agency is the permitting agency. Depending on materials disposal options

identified for ReWild MB, this regulation may be applicable if ocean disposal of dredged material is proposed.

If ocean disposal is identified for ReWild MB, the Corps would issue a DA permit pursuant to Section 103 of the MPRSA.

National Environmental Policy Act, as amended

NEPA established a U.S. national policy promoting the enhancement of the environment and also established the President's Council on Environmental Quality (CEQ). NEPA requires federal agencies to conduct an interdisciplinary analysis of the environmental consequences of their actions early in the decision-making process. CEQ regulations require agencies to create their own NEPA implementing procedures that meet the CEQ standard while reflecting each agency's unique mandate and mission. Consequently, NEPA procedures vary from agency to agency, but generally a project will qualify for a Categorical Exclusion or require preparation of an Environmental Assessment or Environmental Impact Statement. The NEPA lead agency has yet to be identified for ReWild MB; therefore NEPA requirements will be influenced by the specific agency processes.

The appropriate NEPA document will be determined once a proposed project has been developed and a NEPA lead agency has been identified. The federal lead agency may identify either an Environmental Assessment or Environmental Impact Statement as the appropriate NEPA document for ReWild MB.

National Historic Preservation Act

The National Historic Preservation Act (NHPA), as amended (16 USC Sections 470–470w), is the fundamental law concerning the protection of cultural resources on federal land, or cultural resources that may be affected by an undertaking that requires federal financial assistance, or a federal permit, license, or approval. Under the NHPA, federal agencies are required to responsibly manage federally owned or controlled cultural resources, as addressed in Section 106 of the NHPA and its implementing regulations.

Section 106 of the NHPA requires federal agencies to take into consideration the potential effects of their undertakings on historic properties, and is generally applicable when an undertaking is the type of activity that has the potential to affect such properties. The purpose of Section 106 is to avoid unnecessary impacts to historic properties from federal undertakings. Typically, to be eligible for listing in the NRHP, a property must be at least 50 years old, or have reached 50 years old by the project completion date and retain a high level of integrity of those attributes that contribute to the property's qualifications for the NRHP.

Section 106 provides a systematic mechanism for taking into account the effects on NRHP-eligible resources from actions that are federally sponsored, funded, or licensed. It requires that the State Historic Preservation Office and Native American tribes with historic ties to the area (and possibly other parties) be afforded an opportunity to comment on the undertaking. The State Historic Preservation Office and Native American consultation to comply with Section 106 requirements will be conducted by the NEPA lead agency prior to completion of the NEPA process.

Rivers and Harbors Act, Section 10

Section 10 of the Rivers and Harbors Act, administered by the Corps, requires DA authorization for all structures (such as riprap) in or over any navigable waters of the U.S. or the accomplishment of any other work (such as dredging) affecting the course, location, condition or capacity of navigable waters of the U.S.

The Corps would determine whether to issue a permit for applicable structures and activities associated with implementation of ReWild MB.

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act (SMARA) of 1975 (PRC Sections 2710–2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to ensure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. PRC Section 2207 provides annual reporting requirements for mines in the state, under which the State Mining and Geology Board is also granted authority and obligations.

Depending on excavated material and materials disposal requirements from the implementation of ReWild MB, an exemption from the requirements of SMARA under PRC Section 2714 may be required from the State Mining and Geology Board .

City of San Diego

In addition to these federal and state compliance requirements, ReWild MB would be required to comply with local regulations, including City Municipal Code regulations, including Stormwater Management and Discharge Control (Water Quality Controls) and Storm Water Runoff and Drainage Regulations. As part of compliance with the Construction General Permit, BMPs would also need to be identified as part of a project Storm Water Pollution Prevention Plan and implemented during and after construction, as applicable.

Summary

This discussion provides a general regulatory overview of the potential agency involvement and requirements associated with implementation of ReWild MB. The ReWild MB Study Area is under the ownership and jurisdiction of a number of different agencies and organizations. The City also has different planning overlays within the Study Area that could affect land uses and development within the ReWild MB boundaries. At this point in preliminary project planning, the ultimate project proponent and specific agency involvement for CEQA and NEPA is unknown. Specific regulatory requirements for ReWild MB will ultimately depend on the proposed project developed for implementation and what agencies lead the CEQA and NEPA processes.

APPENDIX A REFERENCES

AMEC 2015. Mission Bay Watershed Management Area Water Quality Improvement Plan. Prepared by AMEC Foster Wheeler Environment & Infrastructure, Inc. (AMEC). Submitted to the San Diego Regional Water Quality Control Board by the County of San Diego and Caltrans. June 2015.

SWRCB 2015. Final 2012 California Integrated Report (Clean Water Act Section 303(d) List/ 305(b) Report), Staff Report, Appendix A: Category 5 List (2012 California 303(d) List Of Water Quality Limited Segments). Prepared by State Water Resources Control Board (SWRCB). April 2015.
http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml

Stockwell et al. 1977. A water quality study of Mission Bay. Joint Report by California Regional Water Quality Control Board, California Department of Health and San Diego County Department of Public Health. Prepared by Stockwell, H.M., L. Burtman, and J.R. Philip.

COASTAL CONSERVANCY

Staff Recommendation
May 29, 2014

MISSION BAY WETLANDS CONCEPTUAL PLAN

Project No. 14-012
Project Manager: Megan Cooper

RECOMMENDED ACTION: Authorization to disburse up to $460,000 to the San Diego Audubon Society to develop a conceptual plan for the Mission Bay wetlands.

LOCATION: Mission Bay, City of San Diego

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location and Site Maps

Exhibit 2: Site Photos

Exhibit 3: City of San Diego Plans to Restore Wetland Habitat in Proposed Planning Area

Exhibit 4: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251 - 31270 and 31111 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of up to four hundred sixty thousand dollars ($460,000) of Conservancy funds to the San Diego Audubon Society to be used for developing a conceptual plan for the Mission Bay wetlands. Prior to the disbursement of funds, the San Diego Audubon Society shall submit for the review and written approval of the Conservancy's Executive Officer a work program, including budget and schedule, and any contractors to be employed for these tasks."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 6 of Division 21 of the Public Resources Code, regarding enhancement of coastal resources, and with Section 31111 of the

Public Resources Code, regarding grants to nonprofit organizations to undertake plans and feasibility studies.

2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The San Diego Audubon Society is a nonprofit organization existing under section 501(c)(3) of the Internal Revenue Service, and whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize the disbursement of up to four hundred sixty thousand dollars ($460,000) of Conservancy funds to the San Diego Audubon Society (SDAS) to be used for developing a conceptual plan (the "Plan") for the Mission Bay wetlands. This Plan will develop approaches to protect and enhance 40 acres of existing tidal wetland habitat and for the restoration of approximately 130 acres of wetland and upland habitat on a site that was once wetland, but was filled to create an RV campground. Enhanced public access for research, education, and passive recreation will be another significant focus of the planning effort.

As in much of Southern California, wetlands in Mission Bay have been drastically altered and destroyed over the past 200 years (see Exhibit 1, Figure 3). Approximately 5 percent of the historic wetlands (i.e., salt marsh, mudflat, salt pan) in Mission Bay remain today. This system-wide destruction has left much of Mission Bay without the functional benefit of wetlands to provide sediment trapping, nutrient uptake, and habitat/cover for native biota. Anticipated sea-level rise poses a significant threat to the remaining wetlands, since little transitional habitat is available for migration. The planning area is the most likely area in Mission Bay where wetlands and their associated ecosystem processes can be recovered. In addition to the wetland habitat, the planning area also includes areas that could be restored to native upland habitats, areas for upslope marsh migration as sea levels rise, and public recreation and education opportunities (see Exhibit 2).

The Kendall-Frost marsh is the last remaining salt marsh habitat in Mission Bay. When the adjacent wetlands were filled with dirt and soil in 1967 to build Campland on the Bay ("Campland"), Kendall-Frost was cut-off from Rose Creek, its historic source of marsh-sustaining freshwater, sediment and nutrients. As a small, fragmented habitat, Kendall-Frost is suffering the negative ongoing results of edge effects, although it still supports one of the few remaining habitat sites in California for the federally-listed endangered Light-footed Clapper Rail and state-listed Belding's Savannah Sparrow.

It has been the City of San Diego's policy to explore the restoration of salt marsh habitat in the area adjacent to Kendall-Frost for 36 years, starting with the Mission Bay Park Master Plan (1978). However, the City of San Diego ("the City") has not initiated a public planning process with this focus, likely because of funding and staffing shortfalls, and conflicting priorities. Localized factors make the timing of the proposed planning effort particularly auspicious. Properties within this site are designated State tidelands within the coastal zone, which limits private uses to leases granted by the City. A key lease at Campland on the Bay ("Campland")

will expire in 2017 and the City will need to decide soon what to do with these State tidelands. Another lease on State tidelands expired in 2003 at De Anza Point (aka Mission Bay RV Resort). This Plan will provide the City and the surrounding communities with a vision of the ecological restoration and public access that could be possible on the Campland property, as an alternative to a lease renewal for the RV Park, and possibly on portions of the De Anza Point property. And although the City hasn't initiated this planning process, most of the areas for the proposed Plan are City-designated restoration areas or "special study" areas (see "Site Description" below). Furthermore, the recently elected Mayor of San Diego listed the expansion of Mission Bay's wetlands as one of his top priorities (see Required Criteria #3).

The specific tasks for this funding authorization include developing a working group and a technical advisory group, identifying existing and historical conditions, preparing goals and objectives, identifying opportunities and constraints, developing a range of restoration alternatives, and conducting stakeholder outreach. Community outreach and engagement will be a major part of this planning process because the involvement of the neighboring communities will be critical to the success of the Plan. The wetland working group and/or technical advisory group will consist of representatives from relevant departments within the City, the operator of Campland, community groups representing neighbors and other interested parties, resource and regulatory agencies, academics and other technical experts. The final product will be a written Plan with at least three feasible conceptual restoration alternatives that will be appropriate and sufficiently robust for environmental analysis (CEQA/NEPA) as part of a subsequent phase.

Founded in 1948, the San Diego Audubon Society (the grantee) has served the San Diego region for over 60 years. Its mission is to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and advocate for a cleaner, healthier environment. The grantee has been restoring sensitive dune and salt marsh habitats, and maintaining California least tern nesting sites in Mission Bay for over 20 years. It has a skilled team of staff dedicated to the proposed planning effort, and a working Board made up of highly respected and influential scientists and community members. This fiscal year, the grantee will host approximately 25 habitat maintenance/restoration volunteer events and will manage approximately $400,000 in grants and other funding.

Site Description: The planning area encompasses approximately 270 acres in the northeast corner of Mission Bay, San Diego surrounding the mouth of Rose Creek (see Exhibit 1). There is approximately 170 acres of existing or potential habitat within this planning area. The habitat areas include the 40-acre Kendall-Frost Marsh Reserve ("Kendall-Frost"), which includes the City's 24-acre Northern Wildlife Preserve and UCSD's 16-acre Kendall-Frost Marsh. Adjacent to Kendall-Frost is the 3-acre Frost parcel, which is an upland area with limited habitat function owned by the City of San Diego. The entire Kendall-Frost area is operated by UCSD as a Natural Reserve. Kendall-Frost has been the site of important research on wetland ecosystems and educational activities for almost 50 years. The potential habitat area also includes the 50-acre Campland site, which was identified as a wetlands restoration area by the City of San Diego in the Mission Bay Master Plan (see "Project History" section below). The 80-acre De Anza Point is also considered potential habitat area. De Anza Point was identified as a "special study area" by the Mission Bay Natural Resources Management Plan (1995). The City is currently in the process of relocating the residents of the De Anza Point RV Park, but this relocation process

is in litigation. Both De Anza Point and Campland are only open to residents or campers, guarded by gates and security guards, and are not readily open to the public. In addition to the potential habitat areas, the planning area also encompasses approximately 100 acres of active recreation area owned by the City, including a public golf course.

The planning area includes protected salt marsh habitat, as well as disturbed and urbanized areas. Portions of the planning area are included in the South Coast unit of the Natural Community Conservation Planning (NCCP) Multiple Species Conservation Plan for San Diego County and the San Diego Multiple Habitat Conservation Program (MHCP) plan. Mission Bay Park has been identified as a Globally Important Bird Area by Birdlife International and the National Audubon Society.

Project History: The proposed Plan would further the implementation or recommendations of the Mission Bay Park Master Plan (1978), the Mission Bay Natural Resources Plan (1990), the Mission Bay Master Plan Updates (1994 and subsequent), the USFWS's Light-footed Clapper Rail Recovery Plan (1985), and the Rose Creek Watershed Opportunities Assessment (2008). The need to develop a plan for restoration of the area around the mouth of Rose Creek was first identified 36 years ago in the Mission Bay Park Master Plan (1978). The 1978 Mission Bay Park Master Plan states that "consideration should be given to adding this area [Campland lease] to the Northern Wildlife Reserve upon termination of the lease [2017]." The Mission Bay Park Natural Resources Management Plan (1990) builds on the intentions of the original Master Plan and says, "From a resource management perspective, eastern and western expansion of the Northern Wildlife Preserve salt marsh has a high priority. Such expansion would broaden the base for all of Mission Bay Park's natural resources in the face of urban pressure and future threat of rising sea level." The Natural Resources Management Plan identified Campland as "possible salt marsh addition" (see Exhibit 3). The concept of marsh restoration was furthered in the Mission Bay Park Master Plan Update (2002). The Master Plan Update states: "An 80-acre saltwater marsh is proposed west of Rose Creek adjacent to the existing Northern Wildlife Preserve. This recommendation requires the relocation of the Recreational Vehicle Park (Campland on the Bay), possibly to the east side of the Creek as a potential use in the proposed De Anza Special Study Area" (see Exhibit 3). The Master Plan update also identified Campland as future "wetland habitat". Additional City planning included the Rose Creek Opportunities Assessment (2005), which was funded by the Conservancy in 2005. This Opportunities Assessment identified restoration of the wetlands at the mouth of Rose Creek as the top biological priority for the watershed. On October 21, 2008 the City approved the Opportunities Assessment as official City policy guidance for the restoration of Rose Creek.

PROJECT FINANCING

Coastal Conservancy	$430,000
U.S. Fish and Wildlife Service	$25,000
Project Total	**$455,000**

The expected source of Conservancy funds for this project is an appropriation to the Conservancy from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84, Public Resources Code sections 75001et seq.). This funding source may be used for the protection of coastal watersheds in San Diego County. Proposition 84 allows for the utilization of funds for expenditures pursuant to Division 21 of the Public Resources Code, as specified in Section 75060(b), and for projects that protect San Diego Bay and adjacent watersheds, as specified in Section 75060(f). As specified in Section 75072.6, for purposes of Section 75060(f), "San Diego Bay and adjacent watersheds" includes the coastal and bay watersheds within San Diego County. Pursuant to Section 75060(b), funds may be allocated to the improvement and protection of coastal and marine water quality and habitats, so long as the project is compliant with Division 21 of the Public Resource Code.

The U.S. Fish and Wildlife Service will contribute money from their Coastal Program for a portion of the plan. Their contribution of $25,000 represents 30% of the Coastal Program's annual budget, indicating the importance of this planning effort to their strategic goals.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 6 of the Conservancy's enabling legislation, Public Resource Code Sections 31251-31270, and pursuant to Section 31111.

Consistent with Section 31251 of the Public Resources Code, the proposed project would award a grant to a nonprofit organization to undertake activities necessary for the enhancement of the natural and scenic character of Mission Bay, which has been impacted by indiscriminate dredging and filling, improper location of improvements, human-induced events, and incompatible land uses and has suffered the loss of natural and scenic values. This project will provide studies and plans necessary to restore and enhance the biological and hydrological resources of Mission Bay.

As required in Section 31252, the proposed project has been identified in the City of San Diego's Local Coastal Program as described in the "Consistency with Local Coastal Program Policies" section, below.

Section 31253 permits the Conservancy to provide up to the total cost of any coastal resource enhancement project, consistent with established project eligibility and priority factors. In determining the amount of Conservancy funding for this project, the factors identified in Section 31253 have been considered and applied, as described in detail below, under the heading "Consistency With Conservancy's Project Selection Criteria & Guidelines".

Section 31111 permits the Conservancy to award grants to nonprofit organizations for the purpose of funding and undertaking plans and feasibility studies.

CONSISTENCY WITH CONSERVANCY'S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 5, Objective A** of the Conservancy's 2013-2018 Strategic Plan, the proposed project will develop a plan for the restoration and enhancement of coastal habitats.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on November 10, 2011, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** During his election campaign, the recently elected Mayor of the City of San Diego said, "In coming years, the City will use Mission Bay Initiative revenue to expand Mission Bay's wetlands, improve water quality, expand endangered species habitats, improve bicycle and pedestrian paths and restore parts of the seawall. Kevin [Faulconer] believes this is a prime example of what we can achieve when City Hall, businesses, and residents work in unison towards a common goal." The City will be an integral part of the wetland working group and/or technical advisory committee, which will lead the development of the Plan. City council members, State elected officials, community groups ad scientists also support the project. See Exhibit 4 for evidence of support.

   Although there is enthusiastic support for the project, there will also be those who are concerned about it. The Campland operators would like to stay on the site until their relocation to the nearby De Anza Point has been secured. Some nearby residents might be concerned about flooding issues connected with reconfiguring the hydrology of the area. And the residents of De Anza Point will be concerned about planning surrounding their community. The grantee will incorporate concerns such as these into the Plan through an extensive community outreach and engagement process where all concerned citizens will be invited to engage.
4. **Location:** The proposed project would be located within the coastal zone of the City of San Diego.
5. **Need:** The timing of this Plan is critical. The lease for the Campland property expires in 2017. Without a plan for the restoration of the site, it is possible that the City will extend Campland's lease and that the restoration project will become impossible for a long period of time. The Conservancy's funds will provide the initial investment that will enable future investments in engineering and construction.
6. **Greater-than-local interest:** Mission Bay Park encompasses about 4,200 acres and about 27 miles of shoreline and beaches. It is said to be the largest "aquatic park" of its kind in the country and it attracts millions of visitors each year. Restoring wetlands in Mission Bay would provide visitors with enhanced opportunities to experience the natural environment that once occurred throughout Mission Bay. In addition, the tidal wetlands of Southern California are part of a large mosaic that functions as an interconnected system. The

restoration of Mission Bay's wetlands will provide an expanded migratory bird stopover area, a source for seed and larvae, habitat for State and Federal threatened and endangered species, and improvements in water quality.

7. **Sea level rise vulnerability:** The planning area is located in an area that is vulnerable to future sea level rise. The conceptual plan will consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. The restoration of wetlands in the planning area would provide wetland species with upland migration areas and could also reduce flooding impacts on surrounding infrastructure by buffering waves and tides.

Additional Criteria

8. **Urgency:** The timing of this Plan is critical. The lease for the Campland property expires in 2017. Without a plan for the restoration of the site, it is possible that the City will extend Campland's lease and that the restoration project will become impossible for a long period of time.
9. **Resolution of more than one issue**: The Plan would help resolve multiple issues such as habitat availability, endangered species management, water quality and sea level rise. In addition, it would also help resolve remaining land-use issues within the planning area regarding recreation and visitor-serving amenities.
10. **Leverage**: See the "Project Financing" section above.
11. **Conflict resolution**: There is currently a conflict between Campland, De Anza Point, the City of San Diego, and the environmental community over how the land in the planning area should be used. The proposed Plan would present feasible options for restoration of some parts of the planning area so that discussions could proceed about where recreation and visitor-serving amenities should be placed within the area.
13. **Readiness**: The grantee and its partners are ready to start the project immediately.
14. **Realization of prior Conservancy goals**: See "Project History" above. In addition, the proposed Plan was added to the Work Plan for the Southern California Wetlands Recovery Project (WRP) in 2013, which is a prioritized list of projects for Southern California that has been vetted by the 18 member agencies of the WRP.
18. **Minimization of greenhouse gas emissions:** The project design will include measures to avoid or minimize greenhouse gas emissions to the extent feasible and consistent with the project objectives.

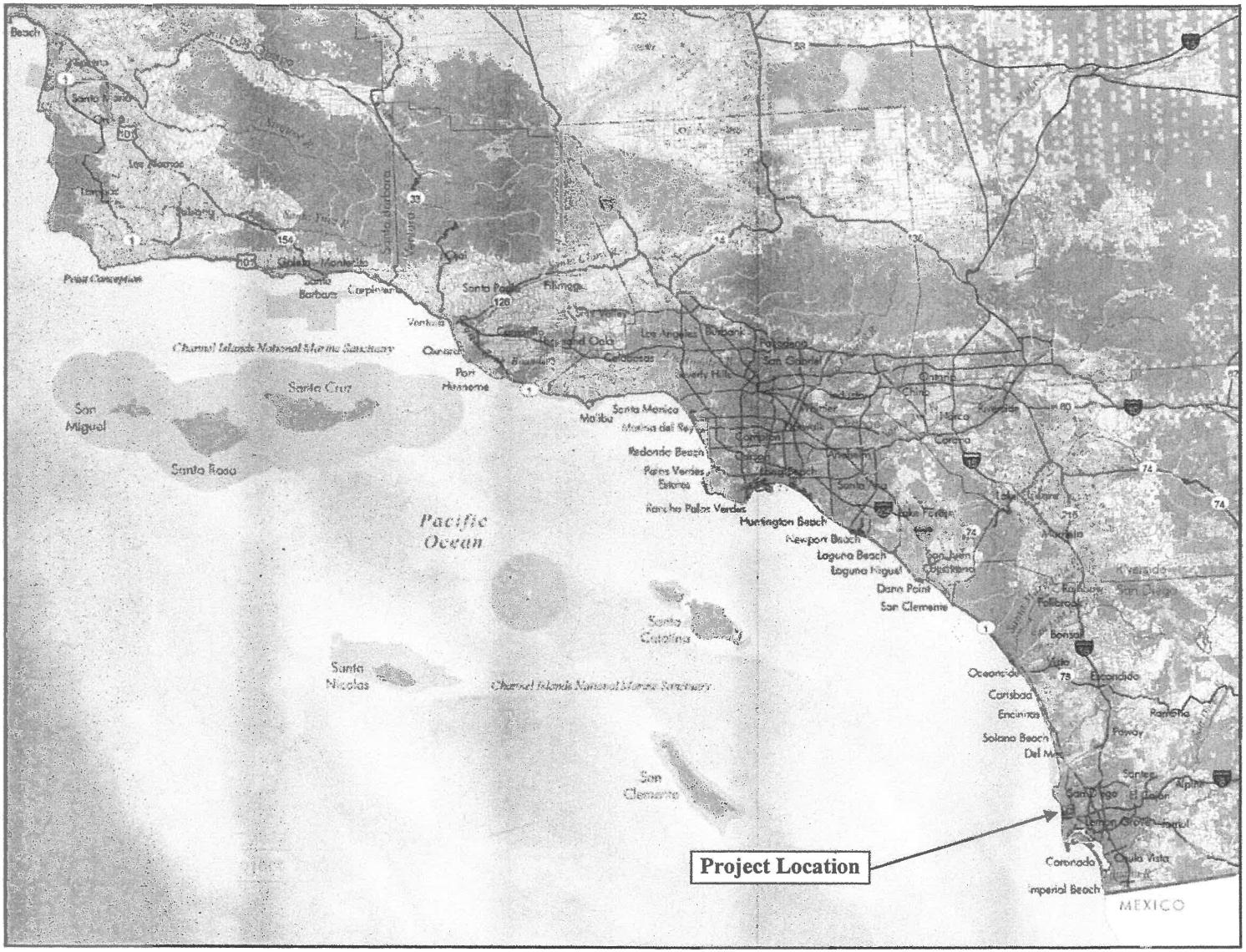
CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The Mission Bay Park Master Plan Update (1994, as amended) serves as the City of San Diego's Local Coastal Program (LCP) for the area the proposed planning area. The proposed Plan is consistent with the recommendations of this LCP. See "Project History" above for more information on the consistency of the proposed Plan with the Mission Bay Park Master Plan Update.

COMPLIANCE WITH CEQA:

The proposed project is statutorily exempt from the provisions of CEQA under 14 California Code of Regulations, Section 15262 exempting feasibility studies for possible future actions that the Conservancy has not approved, adopted or funded and which do not require preparation of an EIR or negative declaration. Staff will file a Notice of Exemption upon approval of the proposed authorization.

Exhibit 1: Project Location and Site Maps



U.S. Fish & Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Ave. Suite 250, Carlsbad, California 92008

Mission Bay Wetlands Initiative

Figure 2. Planning area for Mission Bay Wetlands Conceptual Restoration Plan.

Produced by: GIS Services
Carlsbad Fish & Wildlife Office
GIS CONTACT: Tony McKinney
BIOLOGY CONTACT: Carolyn Lieberman

Map Date: 27 March, 2014
Data Source: San Francisco Estuary Institute
IMAGE SOURCE: USDA NAIP 2012
/staff/CarolynL/N_Mission_Bay/Miss_Bay_Project..mxd

N

0 0.075 0.15 0.3 Miles

0 0.075 0.15 0.3 Kilometers

Project Area
Initiative Areas

U.S. Fish & Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Ave. Suite 250, Carlsbad, California 92008

Project Setting in Mission Bay, San Diego, CA

Figure 3. Context of planning area within Mission Bay.

Produced by: GIS Services
Carlsbad Fish & Wildlife Office
GIS CONTACT: Tony McKinney
BIOLOGY CONTACT. Carolyn Lieberman

Map Date: 27 March, 2014
Data Source: San Francisco Estuary Institute
IMAGE SOURCE: USDA NAIP 2012

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N

0 0.25 0.5 1 Miles

0 0.25 0.5 1 Kilometers

Project Area
Initiative Areas

U.S. Fish & Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Ave. Suite 250, Carlsbad, California 92008

T-Sheet Historical Habitat in Mission Bay, San Diego, CA

Figure 4. Historical habitat distribution in Mission Bay circa mid-1800's.

Produced by: GIS Services
Carlsbad Fish & Wildlife Office
GIS CONTACT: Tony McKinney
BIOLOGY CONTACT: Carolyn Lieberman

Map Date: 27 March, 2014
Data Source: San Francisco Estuary Institute
IMAGE SOURCE: USDA NAIP 2012

/staff/CarolynL/N_Mission_Bay/Miss_Bay_all_TSheet..mxd

N

0 0.25 0.5 1 Miles

0 0.25 0.5 1 Kilometers

T-Sheet Historical Habitat

- Bluff
- Channel
- Subtidal Water
- Emergent Marsh, High Elevation
- Emergent Marsh, Low Elevation
- Intertidal Flat

Exhibit 2: Site Photos

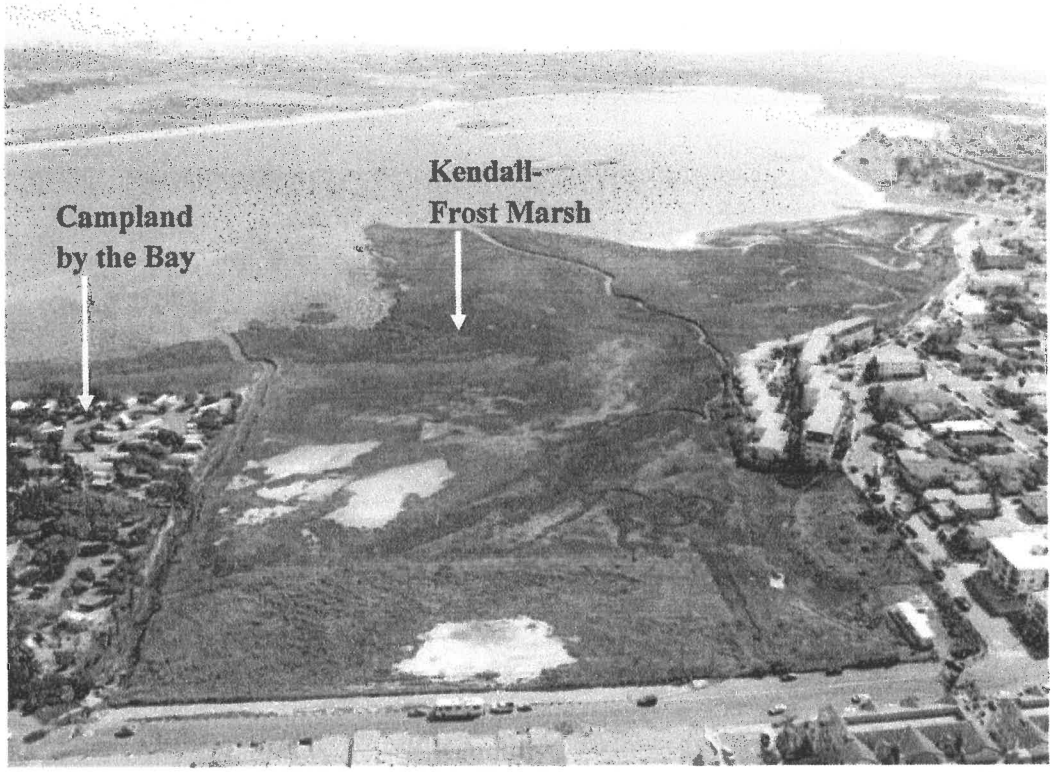


Figure 1. Aerial photo of Kendall-Frost marsh showing surrounding housing, roads and Campland by the Bay.

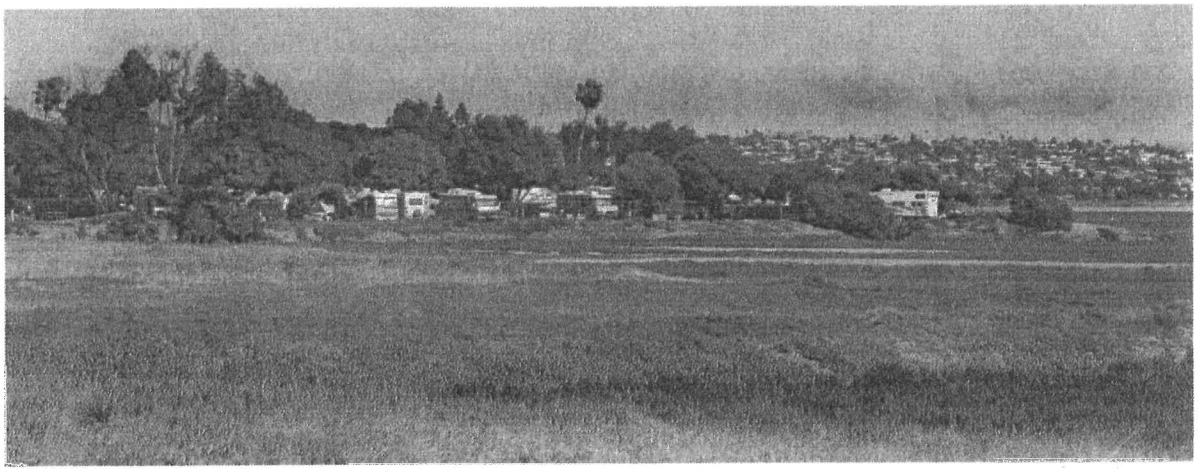


Figure 2. Kendall-Frost marsh with Campland by the Bay in the background.

Exhibit 2: Site Photos

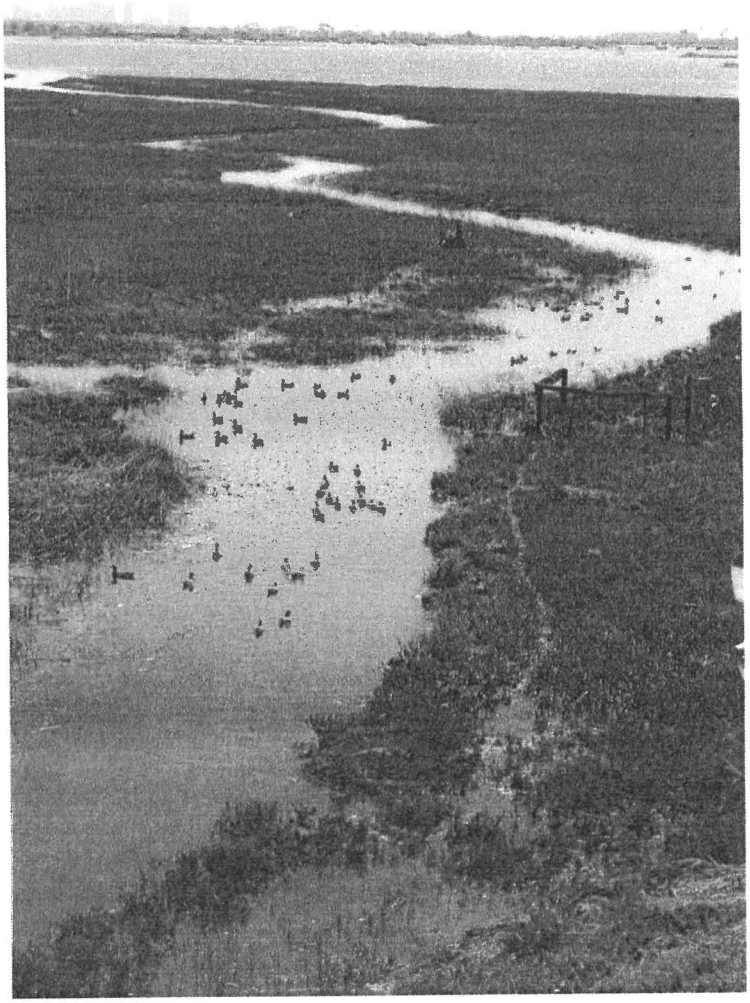
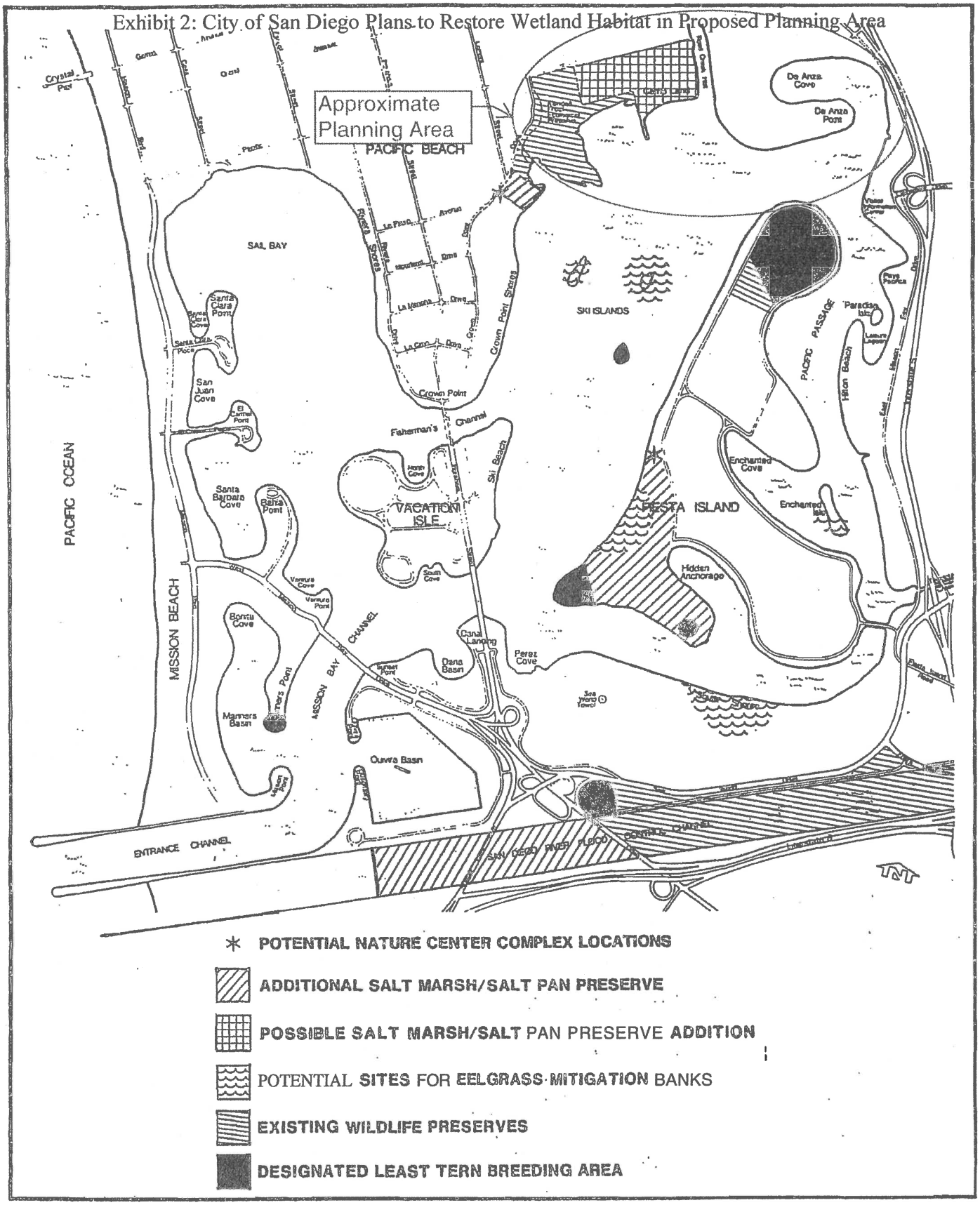


Figure 3. Tidal channels at Kendall-Frost marsh provide habitat for endangered birds and other wildlife.

Exhibit 2: City of San Diego Plans to Restore Wetland Habitat in Proposed Planning Area



* POTENTIAL NATURE CENTER COMPLEX LOCATIONS

ADDITIONAL SALT MARSH/SALT PAN PRESERVE

POSSIBLE SALT MARSH/SALT PAN PRESERVE ADDITION

POTENTIAL SITES FOR EELGRASS MITIGATION BANKS

EXISTING WILDLIFE PRESERVES

DESIGNATED LEAST TERN BREEDING AREA

PROPOSED WILDLIFE PRESERVE ADDITIONS

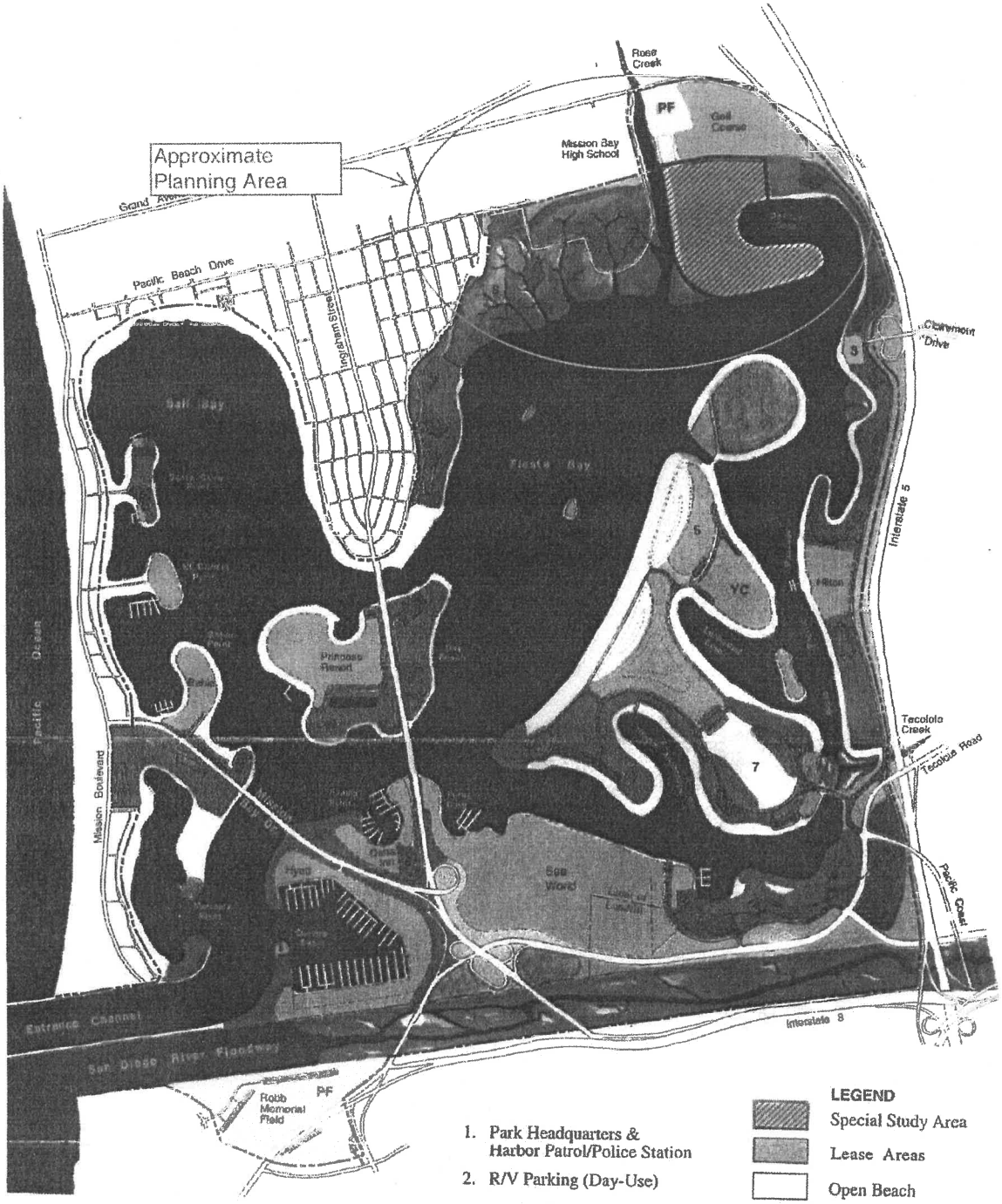
FIGURE 5

Environmental Quality Division

CITY OF SAN DIEGO · PLANNING DEPARTMENT

Mission Bay Park Natural Resources Management Plan, 1990

Exhibit 2: City of San Diego Plans to Restore Wetland Habitat in Proposed Planning Area



Mission Bay Park
San Diego, California

NORTH 0 500 1000 2000 FT.

Land Use

1. Park Headquarters & Harbor Patrol/Police Station
2. R/V Parking (Day-Use)
3. Visitor/Information Center
4. Overflow Parking
5. Primitive Camping
6. Boat Ramp/Trailer Parking
7. Sand Arena
8. Northern Wildlife Preserve
9. Public Amphitheater & Promenade

LEGEND

- Special Study Area
- Lease Areas
- Open Beach
- Parkland
- PF — Playfields
- YC — Youth Camping
- Wetland Habitat
- Upland Preserve
- Coastal Landscape
- Salt Pan

Mission Bay Park Master Plan Update. 1994 as amended

KEVIN L. FAULCONER

MAYOR

April 15, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

Dear Mr. Bosco:

I am writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in Mission Bay, San Diego, and recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

As a former chair of the Mission Bay Park Committee and councilmember for District 2 where this project is located, the restoration of wetland habitat in the northeast corner of Mission Bay will improve water quality and is a key environmental priority for my administration. When this project is funded, I am committed to assigning City of San Diego staff from relevant City departments to participate in this planning effort as appropriate. The project is consistent with the Mission Bay Park Master Plan Update and the Mission Bay Park Natural Resource Management Plan.

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species and providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation is another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally listed endangered), and Belding's Savannah Sparrow (state listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments, and many local nonprofit organizations, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

I appreciate your strong consideration in support of SDAS's application to fund the Mission Bay Restoration Feasibility Study.

Sincerely,

Kevin L. Faulconer
Mayor

cc: Chris Redfern, Executive Director, San Diego Audubon Society

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701 B STREET, SUITE 1840
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HTTP://SD39.SENATE.CA.GOV

California Legislature

COMMITTEES
CHAIR, BUDGET & FISCAL REVIEW SUBCOMMITTEE #1 ON EDUCATION
BUDGET & FISCAL REVIEW
BUSINESS, PROFESSIONS & ECONOMIC DEVELOPMENT
EDUCATION
PUBLIC EMPLOYMENT & RETIREMENT
PUBLIC SAFETY
VETERANS AFFAIRS

MARTY BLOCK
SENATOR, THIRTY-NINTH DISTRICT

April 11, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy:

I am writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in Mission Bay, San Diego, and recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation will be another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Senator Marty Block
39th District

CC: Chris Redfern, Executive Director, San Diego Audubon Society

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Assembly
California Legislature

TONI ATKINS
ASSEMBLYMEMBER, SEVENTY-EIGHTH DISTRICT
MAJORITY LEADER

COMMITTEES
AGRICULTURE
HEALTH
HOUSING AND COMMUNITY DEVELOPMENT
VETERANS AFFAIRS

JOINT COMMITTEES
JOINT LEGISLATIVE AUDIT

April 4, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetlands Restoration Feasibility Study

I write in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetlands habitat in Mission Bay, San Diego, and request that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetlands Restoration Feasibility Study.

Wetlands restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections.

Enhanced public access to the area for research, education and recreation is another significant focus of the planning effort. Development and large-scale alteration of Mission Bay over the decades has resulted in the loss of over 92% of this former estuarine complex's wetlands habitat, including the destruction of habitat for the federally-listed endangered Light-footed Clapper Rail and the state-listed Belding's Savannah Sparrow, plus a significant reduction of important ecosystem functions.

Commitments for wetlands restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan adopted in 1994 by the San Diego City Council and updated in 2002, and the Mission Bay Park Natural Resources Management Plan adopted in 1990.

I was a member of the San Diego City Council when the Mission Bay Master Plan was updated in 2002, and am familiar with this important area of Mission Bay.

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California at San Diego, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

There is local support for preserving and enhancing natural resources in Mission Bay. I urge the Coastal Conservancy to support the Mission Bay Wetlands Restoration Feasibility Study.

Warmly,

Toni Atkins

TONI ATKINS
Speaker-Elect
78th Assembly District

TA:ds

COUNCILMEMBER LORIE ZAPF

SIXTH DISTRICT

CITY OF SAN DIEGO

April 25, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

Dear Mr. Bosco:

As Chair of the City of San Diego's Smart Growth and Land Use Committee, Vice-Chair of the City of San Diego's Environment Committee and as a member of the San Diego River Conservancy Governing Board, I fully support the efforts of the San Diego Audubon Society to protect, restore, and conserve our most precious marshland habitats in Mission Bay through the application of grant funds for the Mission Bay Wetland Restoration Feasibility Study.

For almost 20 years, the City of San Diego has been committed to this vision through the update and implementation of the Mission Bay Park Master Plan (1996). Having represented Mission Bay in the past, I understand the project area and the need for comprehensive restoration. This area, including the Kendall-Frost Reserve, is made up of mudflats, eelgrass beds, coastal sage scrub, tidal channels, and south coastal salt marsh- all of which need to be protected. This feasibility study will begin that important process.

This area is also home to the Light-footed Clapper Rail (federally-listed endangered) and the Belding's Savannah Sparrow (state-listed endangered) and both have seen Mission Bay lose over 92% of its wetland habitat. Using the proposed feasibility study, this project will enhance over 140 acres of tidal marshlands and create 30 acres of transitional/upland habitat connecting several ecosystems.

I am confident that with this grant money the San Diego Audubon Society will work effectively with numerous stakeholders and wildlife agencies including the City of San Diego, the San Diego Association of Governments (SANDAG), and one of our premier universities, University of California San Diego to ensure the survival of this precious wetland. I urge you to support them in this utmost important endeavor.

Sincerely,

Lorie Zapf

Lorie Zapf
District 6 Council Member
City of San Diego

CC: Chris Redfern, Executive Director, San Diego Audubon Society

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COUNCILMEMBER ED HARRIS

SECOND DISTRICT
CITY OF SAN DIEGO

April 29, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

As the Councilmember representing Mission Bay and the surrounding communities, I am writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in this area. I highly recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Ed Harris
District 2 Councilmember

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(619) 236-6622 • EMAIL: EDHARRIS@SANDIEGO.GOV

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April 30, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,
I am writing to recommend that the State Coastal Conservancy fund the San Diego Audubon Society's (SDAS) Mission Bay Wetland Restoration Feasibility Study that includes the University of California's property within the Kendall-Frost Marsh Reserve.

Wetland restoration is critical for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing areas for marsh migration with rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation will be another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the city of San Diego's Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Lisa A. Levin

Lisa A. Levin, Professor, SIO, and Faculty advisor, KF Marsh Reserve

cc: Chris Redfern, Executive Director, San Diego Audubon Society

April 28, 2014

Mr. Douglas Bosco, Chairman

State Coastal Conservancy

1330 Broadway, 13th Floor

Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

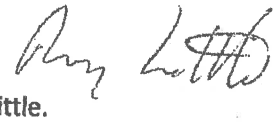
On behalf of the Friends of Mission Bay Marshes I wish to state our enthusiastic support for the WRP proposal you are heading to study the eastward expansion of the Kendall-Frost/Northern Wildlife Preserve

Our organization is a small informal one, made up of local residents interested in the K-F/NW marsh. Our main aim is to keep the marsh viable by and educating ourselves and the public about the importance of the marsh for the local ecology. In practice we do this by assisting UCSD in marsh activities and disseminating information locally. We are advocates of expanding the marsh to re-incorporate Rose Creek, to make the marsh more sustainable and in the long-term to ensure the marsh's future as sea level rises.

Your proposal fits very well into the overall WRP strategy and the City of San Diego's Mission Bay Improvements. The Campland lease expiration and the De Anza Cove expected availability makes this a unique opportunity to provide more wetlands in Mission Bay.

We will participate in your proposal and subsequent activities as best we can.

Yours sincerely,



Roy Little.

4003 Crown Point Drive, V22,

San Diego, CA 92019

Cc:Chris Redfern, Executive Director, San Diego Audubon Society.

April 24, 2014

Mr. Douglas Bosco, Chairman
State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Dear Chairman Bosco and Board Members of the State Coastal Conservancy,

RE: Letter of Support for the Mission Bay Wetland Restoration Feasibility Study

The Rose Creek Watershed Alliance is a group of organizations formed to help plan the future of the Rose Creek Watershed, which drains a 23,427-acre area of San Diego County into Mission Bay. We are writing in support of the San Diego Audubon Society's (SDAS) effort to protect and restore critical wetland habitat in Mission Bay, San Diego, and recommend that the State Coastal Conservancy support SDAS's application to fund the Mission Bay Wetland Restoration Feasibility Study.

The Alliance was established in 2005 to help create a plan to improve the watershed, and after almost five years of consideration and public input, the San Diego City Council accepted the Rose Creek Watershed Opportunities Assessment on October 21, 2008. The 16-member Alliance (including the Mission Bay Park Committee, Friends of Rose Creek, and the Pacific Beach Planning Group) has been working together since then to help implement its recommendations.

The Feasibility Study proposed by SDAS is not only consistent with this plan, but directly implements recommendations included in it. Specifically, the plan calls for action to "enhance the biological connection of the Rose Creek Watershed [RCW] to Mission Bay… restore and enhance native habitats within the RCW…assess potential for habitat enhancements for the light-footed Clapper Rail…[and] expand wetland and riparian habitats where feasible."

Wetland restoration is vital for the protection of Mission Bay's natural resources, including several threatened and endangered species, as well as providing a buffer against rising sea levels. This project will develop approaches to protect, improve, or create 140 acres of tidal marsh habitat, as well as 30 acres of transitional/upland habitat to allow for improved ecosystem connections. Enhanced public access for research, education, and recreation will be another significant focus of the planning effort.

Such action is needed because development and large-scale alteration of Mission Bay has resulted in the loss of over 92% of this former estuarine complex's wetland habitat, including the destruction of habitat for the Light-footed Clapper Rail (federally-listed endangered) and Belding's Savannah Sparrow (state-listed) and a significant reduction of important ecosystem functions. Commitments for wetland restoration in the project area have been in place for almost 20 years, starting with the Mission Bay Master Plan (1996).

This project will convene cross-industry stakeholders, including members of the public, state and federal wildlife agencies, City of San Diego, University of California, San Diego Association of Governments (SANDAG), and many local non-profits, in seizing one of the last opportunities for large-scale wetland restoration in Southern California.

Sincerely,

Ann Van Leer

Ann Van Leer
Rose Creek Watershed Alliance
ann@landconserve.com
858-442-0937

CC: Chris Redfern, Executive Director, San Diego Audubon Society