OCEAN PROTECTION COUNCIL

Item 6

Staff Recommendation
June 14, 2022

Consideration and Approval of Disbursement of Funds for Phase 1 of the Loma Alta Slough Wetlands Enhancement Project

Maria Rodriguez, Wetlands Program Manager

RECOMMENDED ACTION: Staff recommends authorization to disburse up to $1,011,391 to the City of Oceanside for the implementation of Phase 1 of the Loma Alta Slough Wetlands Enhancement Project, which will restore 5.8 acres of wetland habitat in the Loma Alta Slough.

LOCATION: Oceanside, California

STRATEGIC PLAN GOALS AND OBJECTIVES: This project would implement strategic targets in Goal 1 Safeguard Coastal and Marine Ecosystems and Communities in the Face of Climate Change, Goal 2 Advance Equity Across Ocean and Coastal Policies and Actions and Goal 3 Enhance Coastal and Marine Biodiversity. Specifically, within these objectives: Objective 1.1: Build Resiliency to Sea-Level Rise, Coastal Storms, Erosion, Flooding; Objective 1.2 Minimize Causes and Impacts of Ocean Acidification and Hypoxia; Objective 2.3: Improve Coastal Access; Objective 2.4 Enhance Healthy Human Use of the Coast and Ocean; Objective 3.1: Protect and Restore Coastal and Marine Ecosystems; and Objective 3.4: Improve Coastal and Ocean Water Quality.

EXHIBITS: Exhibit 6b1 Project Location Map and Project Area Maps
Exhibit 6b2 Notice of Completion

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:

> "Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:
>
> 1) The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the California Ocean Protection Act;

2) The proposed projects are consistent with the adopted State Water Resources Control Board's Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling; and
3) The proposed project is a habitat and wetland restoration project to improve water quality in the Loma Alta Slough, restore habitat for native species, provide flood protection, increase climate resiliency, and improve recreational opportunities. A Draft Initial Study/ Mitigated Negative Declaration (ISMND) was prepared by the City of Oceanside, the lead agency for California Environmental Quality Act (CEQA) compliance and is anticipated to be certified by the end of this year. See **Exhibit 6b2** for the Notice of Completion. OPC has reviewed the draft CEQA document and recommends that the mitigation and avoidance measures in the final certified CEQA document be adopted as a condition of approval. OPC will act as a responsible agency pursuant to CEQA Guideline 15096 and provide an informational update to the Council when CEQA findings are finalized. OPC funds for the project will not be released until after the City completes a notice of determination and certification, including any mitigation and avoidance measures identified in the certified ISMND."

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

"OPC hereby approves the disbursement of up to $1,011,391 to the City of Oceanside for the implementation of Phase 1 of the Loma Alta Slough Wetlands Enhancement Project, which will restore 5.8 acres of wetland habitat in the Loma Alta Slough.

This authorization is subject to the condition that prior to disbursement of funds, the City of Oceanside shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery."

EXECUTIVE SUMMARY:

Staff recommends authorization to disburse mitigation funds (required by the Coastal Commission to be disbursed through OPC's Once-Through Cooling Interim

Mitigation Program to offset impacts from the San Onofre Nuclear Generating Station) to support implementation of Phase 1 of the Loma Alta Slough Wetlands Enhancement Project (project). Phase 1[1] of the project involves enhancement of the existing marsh in the Loma Alta Slough (Slough) and restoration of marsh and transitional uplands in the adjacent properties. The 5.8-acre project site, owned by the City of Oceanside (City), is located in the City's jurisdiction in north San Diego County (See Exhibit 6b1). The project will provide multiple benefits by improving and restoring habitat for native species, including state endangered Belding's Savannah sparrow and federally endangered light-footed Ridgway's rail, providing increased habitat resiliency to sea-level rise, improving water quality in the Slough, and enhancing recreational enjoyment of the area.

In 2019, the California Coastal Commission (CCC) required that Southern California Edison Company (SCE) make a one-time payment to OPC's Once-Through Cooling Interim Mitigation Program (OTC Program) to mitigate for expected effects the decommissioning of Units 2 and 3 of the San Onofre Nuclear Generating Station (SONGS) would have on marine life and coastal water quality. OPC and CCC staff worked in collaboration to consider eligible projects and selected the Loma Alta Slough Wetlands Enhancement Project as the most appropriate project to direct those funds toward. The restoration and enhancement of the Slough's coastal tidal estuary habitat will add critically needed refuge for sensitive marine life within the geographic region of the SONGS facility, as defined by the OPC Science Advisory Team (OPC-SAT) Working Group's 2018 scientific guidance for ocean restoration methods. This project addresses OTC Program priority investment category for restoration and is aligned with the OTC Program's Award Guidelines. If approved, these funds will help the City complete Phase 1 of the restoration project in its entirety, transitioning nearly three acres of disturbed habitat into 5.8 acres of coastal wetland, mudflat, and open water habitat.

In addition to the restoration of nearshore and estuarine habitats, this project also proposes to incorporate public access trails and educational signage features to promote community awareness of coastal wetland habitats and their ecological importance.

PROJECT SUMMARY:

Background:

In June 2019, the CCC approved a proposal from SCE to decommission, demolish, and dispose of portions of SONGS Units 2 and 3 in accordance with federal

[1] Phase 1 of this project includes 5.8 acres of wetland habitat restoration on City-owned property. Phase 2 includes restoration of an additional 5.8 acres on an adjacent property, known as the Parent Family Trust property, and would not commence until the property is acquired by the City at a later date and under a separate funding source.

Nuclear Regulatory Commission standards for handling and disposing of radioactive waste.

To address potential project impacts to protect the quality of coastal waters, ensure biological productivity, and protect against the release of hazardous materials, the CCC required several Special Conditions when approving the proposal to mitigate for expected effects on marine life and to implement water quality control and spill prevention measures. Special Condition 6 required a payment to the OPC's OTC Program as mitigation for impacts associated with ocean life entrainment and impingement impacts resulting from ocean water intake during the project's life. The CCC required SCE to provide $1,011,391 to the OTC Program to address past and future impacts resulting from the facility's use of seawater between June 2013 and the end of that use which is expected in December 2022.

The CCC provides the following justification for partnering with OPC's OTC Program in the June 2019 staff report[2] written for the CCC's consideration of approval of SCE's permit: "For several reasons, the Commission finds it appropriate to apply this in-lieu fee approach to the SONGS post-shutdown use of seawater. First, although SONGS has greatly reduced its intake water volumes since its 2013 shutdown, the remaining intake volumes still result in adverse effects similar to those caused by other coastal power plants that are required to submit an in-lieu fee for mitigation. Additionally, the SONGS post-shutdown use of intake water is expected to last about nine years – from June 2013 until its planned cessation in 2022 – which is a period similar to those of other power plants that are subject to this fee. Further, and as noted above, the SONGS facility was originally one of the coastal power plants covered by the 2010 once-through cooling policy, albeit subject to a different compliance track that has since ended. Finally, Commission staff has contacted OPC staff and confirmed that OPC would be able to accept a fee from the applicant to be used in the same manner as in-lieu fees collected under the once-through cooling policy. It is therefore appropriate to apply this mitigation approach for the relatively short-term impacts resulting from the nine years of SONGS post-shutdown use of seawater." Page 37 of the staff report provides further information on how the $1,011,391 payment amount was calculated.

The CCC requested that OPC use the funds for one or more projects that involve restoration to increase marine life in coastal areas within the Southern California Bight. OPC and CCC staff worked in collaboration to consider eligible projects and selected the Loma Alta Slough Wetlands Enhancement Project as the most appropriate project to most directly mitigate the impacts of water intake from SONGS.

[2] California Coastal Commission. *Staff Report 9-19-0194 (Southern California Edison)*. 2019. https://documents.coastal.ca.gov/reports/2019/6/W20a/W20a-6-2019-report.pdf

The Slough is approximately 23 miles south of SONGS and is a locally and regionally important natural resource that provides nesting and foraging habitat for marsh and shoreline birds. Common aquatic species likely to occur in the fresh and brackish habitats of Loma Alta Creek (Creek) may include mosquitofish (*Gambusia affinis*), insect larvae, oligochaetes, clams, and snails and potentially the Federally endangered Tidewater goby (*Eucyclogobius newberryi*). However, watershed urbanization, decreased sediment yield, hardening of the channel, degraded water quality, and wetland fill have degraded the health of the Slough. Additionally, the Slough itself has been filled to create developed areas, reducing the overall area available for wetland habitat. In addition to the physical loss of wetland area, water quality issues resulting from urbanization have been ongoing since the 1960s. Currently, both the Creek and Slough are on California's Clean Water Act 303(d) list of impaired water bodies for a variety of inhibiting constituents, most notably indicator bacteria, eutrophic conditions and benthic community impairments. Dry-weather flows from the watershed provide a continuous source of freshwater that may contain contaminants that reduce water quality by causing eutrophic conditions and the growth of algae and bacteria. Typically, water quality problems are exacerbated when the Slough is disconnected from the Pacific Ocean by the sand berm that forms naturally at Buccaneer Beach during dry periods. The proposed project includes improvements to address the degraded health of the Slough, water quality issues, and restore natural hydrology to increase overall ecosystem health for the Slough's habitats and increase marine life.

Project Summary:

Project Location: The project site is located in an urbanized and built-out area in the southern coastal portion of the City of Oceanside, located south of the La Salina Wastewater Treatment Plant (WWTP) and north of Buccaneer Beach Park (see Exhibit 6b1). The Project Site is bounded to the west by Pacific Street and to the east by S. Coast Highway. Adjacent land uses also include the Paradise by the Sea Recreational Vehicle (RV) Park to the south, and commercial facilities to the north with outdoor storage. Freshwater flows from the Creek into the Slough, created coastal wetland habitat that includes both brackish and salt marsh.

Project Description: The project would excavate perpendicular tidal channels, approximately 10-feet wide, from the Creek into the existing marsh to create a sinuous and branching network of channels extending from the Creek through the wetlands to improve drainage. The channels would likely be intertidal when the mouth of the Slough is open (e.g., fully drain at low tide), but pond and retain water when the mouth of the Slough is closed. The new channels proposed for the existing marsh areas would be strategically placed to maximize drainage and habitat benefit through regular ebb and flow of the Slough waters into the back marsh area. This feature would aid in reducing stagnation of the back marsh in the

summer months that contributes to poor water quality and vector concerns from mosquito breeding. The west side of the slope up to the La Salina WWTP would be graded back to a flatter slope and revegetated. Ecosystem restoration includes re-vegetating wetland areas through a combination of seeding and installation of nursery grown container stock. Invasive species would be removed, and some planting of marsh species would be done to ensure adequate seed source and to stabilize areas susceptible to erosion. See table below for proposed habitat types and acreages.

TABLE 1: PROPOSED HABITAT TYPES

Vegetation Community/Land Cover Type	Existing Conditions (acres)	Phase 1 (acres)
Riparian and Wetlands	**3.09**	**3.5**
Wetland[1]	1.25	2.4
Disturbed Wetland	0.33	0
Saltpan/Mudflats[2]	0.26	0.8
Open Water – Estuarine[2]	1.17	0.3
Developed – Concrete/Riprap Channel	0.08	--
Uplands	**2.69**	**2.2**
Upland	0	0.9
Transition[3]	0	0.5
Disturbed Upland	1.65	0.04
Urban/Developed	1.05	0.8
Total Acres	**5.79**	**5.8**

1. Includes coastal brackish marsh and southern coastal salt marsh.
2. In calculating the habitat acreages for the Proposed Project, mudflats and open water were defined by elevation, which varies from the field methods used to define open water and mudflat under existing conditions. As a result, the Proposed Project appears to increase saltpan/mudflat habitat at the expense of open water.
3. This is defined as areas above the jurisdictional wetland elevation (9.4 feet North American Vertical Datum [NAVD]) and below the beginning of upland habitat at 11 feet NAVD. See the Hydrologic and Hydraulic Study (ESA 2020, Attachment B6) for additional information.

Note: Acreages are rounded to the nearest hundredth of an acre, so totals may not necessarily equal the individual categories.

After construction of the Buccaneer Lift Station project[3], the east end of the slope would also be set back to match grade. East of the railroad bridge and south of the Creek, the triangular parcel adjacent to Paradise by the Sea RV Park would be graded to improve drainage to the Creek. North of the Creek, the project site would be graded to marsh elevations with a 50-foot buffer separating the marsh from adjacent development. Perpendicular tidal channels would be excavated to encourage improved flushing of the new marsh. Riprap would be removed from

[3] US EPA. *Buccaneer Sewer Lift Station and Force Main Project*. https://www.epa.gov/wifia/buccaneer-sewer-lift-station-and-force-main-project

some areas along the existing marsh and along the proposed marsh in the northeast of the project site. The restored marsh would be constructed as a bench, gradually sloping up from the Creek bank through intertidal and supratidal elevations, providing a range of open water depths and wetland habitat. Tidal channels would be excavated to increase drainage and circulation. The channels would be allowed to dynamically erode and deposit sediment within the restored habitat and the confines of any new or existing armoring. Refer to Exhibit 6b1 for an illustration of Phase 1 of the project.

To promote outdoor education and passive recreation associated with the restoration, public access improvements and visitor amenities will be constructed, such as new pedestrian trails, educational or interpretive features, and viewing areas with overlooks. A new 6-feet-wide trail will be constructed along the north boundary of the northeast area of the site, which would connect under the railroad bridge to the future Coastal Rail Trail and connect to a new boardwalk west of the railroad abutment across the marsh. The new trail is a critical component to improve connectivity between the coast and regional transportation corridors along South Coast Highway and promotes carbon-free transportation via connection with regional pedestrian/cycling facilities like the Coastal Rail Trail. An overlook would be constructed along the trail to provide views of the marsh and include educational information, such as interpretive signage, about the Slough. These improvements would develop and enhance public access, recreation, and educational opportunities within the site, while balancing the need for protection of sensitive habitats.

This restoration project will provide multiple benefits by improving and restoring habitat for native species, providing increased habitat resiliency to sea-level rise, improving water quality in the Slough, and enhancing recreational enjoyment of the area. The goals of the project are designed to be aligned with the Southern California Wetland Recovery Project's 2018 Regional Strategy. The project focuses primarily on the Wetland Recovery Project's Goal #1, which is preserving and restoring resilient tidal wetlands and associated marine and terrestrial habitats, and Goal #3, which is supporting education and compatible access related to coastal wetlands and watersheds. Both of these goals move toward achieving the vision of restoring and protecting wetlands and rivers along the Southern California coast in order to benefit wildlife and people, and are in alignment with OPC's strategic priorities in Goals 1, 2, and 3 of OPC's Strategic Plan.

The goals and objectives of the project are as follows:

1. ***Create a resilient coastal wetland habitat with associated marine and terrestrial habitats.***

a. Increase coastal wetland habitat with a mix of subtidal, unvegetated flats, vegetated marsh, and wetland-upland transition zone habitats through restoration.
b. By restoring habitats in appropriate areas, minimize the scale, frequency, and cost of maintenance and long-term management.

2. ***Restore ecological and physical processes at Loma Alta Slough to maximize ecosystem benefits and support a dynamic and self-sustaining ecosystem over the long-term.***
    a. Design habitats that will be resilient to sea-level rise, e.g., incorporate natural buffers and transition zones to accommodate migration of wetlands.
    b. Work with other City Departments to collaborate on watershed management to restore natural hydrology and improve water quality.
    c. Develop a long-term management strategy that is proactive, adaptive, minimally intrusive, and process-based.
3. ***Restore the Loma Alta Slough in a manner that promotes research, education, and community engagement in ways compatible with the restored ecosystem.***
    a. Minimize public impacts on habitats and wildlife.
    b. Design and install interpretive or education displays and exhibits that promote environmental stewardship and the connection between the wetlands and the surrounding community.
    c. Solicit and incorporate feedback from members of the surrounding community and other interested parties as part of the restoration process.
    d. Connect trails within the Loma Alta Slough to trails in nearby recreation areas and other pedestrian pathways.

Specifically, completion of this project will meet the OTC Program Funding Priorities, as listed in the Guidelines, by:

- Completing "Restoration that increases marine life in the geographic region of the (SONGS) facility" – the project will increase available habitat to nearshore and estuarine fish and invertebrate species, and improve habitat for migratory and resident nearshore birds
- Creates opportunities for "Outreach and education to improve compliance of MPA regulations statewide" – the project incorporates public access trails and educational signage features to promote community awareness of coastal wetland habitats and their ecological importance
- Furthermore, restoration of Loma Alta Slough will add to the regions' "ecologically connected network… for the replenishment and sustainability

of marine populations across the entire network both in protected and unprotected areas."

Monitoring and Adaptive Management: The complexity of a wetland lagoon restoration, with the presence of sensitive habitats and species, requires implementation of restoration within a monitoring and adaptive management framework. The adaptive management approach relies on monitoring data to regularly assess progress of the site towards achieving the project goals. If the data shows the proposed project is off-track, certain actions will be taken (e.g., tweaking techniques) to achieve the project goals.

Restoration areas will likely be subject to a long-term vegetation and biological monitoring program as a condition of the discretionary approvals and permits that apply to this project. These activities may include but are not limited to sensitive species surveys, quantitative vegetative success criteria, and water quality monitoring.

About the Grantee

The City of Oceanside, incorporated in 1888, is a municipal corporation and has a five-member elected City Council that serves as the legislative body of the corporation. The City's mission is to enhance the quality of life through outstanding service to its diverse community. For more than 20 years, the City has been working to develop restoration plans for the Loma Alta Slough Wetlands Enhancement Project and have been successful in leveraging various grant funds to move the project forward. In 2018, the City received a grant from the California State Coastal Conservancy to begin the planning and design. Since then, they have been awarded a grant from the National Fish & Wildlife Foundation's Coastal Resiliency Fund to finalize designs and have also received a matching grant to fund a portion of implementation through the US Fish & Wildlife Service National Coastal Wetlands Conservation Grant Program. To date, the project's design costs have been 100% grant funded. The City's efforts to move this project forward demonstrates their commitment to protect the City's local waterways, provide outdoor experiences for the community, and ensure long-term resiliency for coastal infrastructure.

Project Timeline

Construction of Phase 1 of the project would occur in the summer to early fall of 2023, after CEQA is completed, and would take 2 to 4 months to complete construction. Site preparation, earthwork, and riprap removal will begin in the summer of 2023, setting the stage for revegetation and trail construction in the Fall of 2023. It will take approximately one season to complete construction activities for Phase 1.

PROJECT FINANCING:

Staff recommends that OPC authorize encumbrance of up to $1,011,391to the City of Oceanside for the implementation of Phase 1 for the Loma Alta Slough Wetlands Enhancement Project.

Ocean Protection Council Once-Through Cooling Interim Mitigation Program Fund Fiscal Year 20/21	$1,011,391
US Fish & Wildlife Service National Coastal Wetlands Conservation Grant Program	$1,000,000
National Fish and Wildlife Foundation National Coastal Resilience Fund	$175,000
State Coastal Conservancy Proposition 1 Fund Fiscal Year 17/18	$460,000
TOTAL	**$2,646,391**

The anticipated source of funds are CCC's required one-time payment of in-lieu fees for SONGS's mitigation that will be disbursed consistent with OPC's Once-Through Cooling Interim Mitigation Program. The recommended project addresses critical restoration priorities of coastal habitats impacted by power plants using once-through cooling technology. The City has also already secured $1,635,000 in additional funding from the sources listed above to ensure that efforts could begin immediately upon receiving funds from OPC.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:

The proposed project is consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because it is consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b)(2) as projects which:

- Eliminate or reduce threats to coastal and ocean ecosystems, habitats, and species.
- Improve coastal water quality.
- Allow for increased public access to, and enjoyment of, ocean and coastal resources, consistent with sustainable, long-term protection and conservation of those resources.
- Improve management, conservation, and protection of coastal waters and ocean ecosystems.
- Protect, conserve, and restore coastal waters and ocean ecosystems.

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

This project is a habitat and wetland restoration project to improve water quality in the Slough, provide a buffer from flooding and sea level rise, improve and restore habitat for native species, and enhance recreational opportunities in the area. A Draft Initial Study/ Mitigated Negative Declaration (ISMND) was prepared by the City of Oceanside, the lead agency for CEQA compliance, and is anticipated to be certified by the end of this year. See **Exhibit 6b2** for the Notice of Completion. OPC has reviewed the draft CEQA document and recommends that the mitigation and avoidance measures in the final certified CEQA document be adopted as a condition of approval. OPC will act as a responsible agency pursuant to CEQA Guideline Section 15096 and provide an informational update to the Council when CEQA findings are finalized. OPC funds for the project will not be released until after the City completes a notice of determination and certification, including any mitigation and avoidance measures identified in the certified ISMND.