OCEAN PROTECTION COUNCIL

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Item 3b

Staff Recommendation
May 23, 2019

Project 3.b.1 has been removed from the agenda. As such, all reference to that project in this staff recommendation is shown in strikeout text.

Restoration Projects that Increase Marine Life Associated with Marine Protected Areas
Tova Handelman, Marine Protected Area Program Manager

RECOMMENDED ACTION: Authorization to disburse up to ~~$3,382,144~~ $2,774,644 from Once-Through Cooling Interim Mitigation Program funds to various grantees as follows:

~~3.b.1 $607,500 to the Los Cerritos Wetlands Land Trust to restore 6.5 acres of coastal salt marsh habitat in the Lost Cerritos Wetlands;~~

3.b.2 $1,081,062 to WILDCOAST to restore 42 acres of degraded wetland habitat surrounding two marine protected areas (MPAs) in San Diego County; and

3.b.3 $1,693,582 to the University of California Santa Barbara to restore impacted rockweed populations from Big Sur to San Diego and including the Channel Islands.

LOCATION: Between Big Sur and San Diego, including state waters around the Channel Islands.

STRATEGIC PLAN OBJECTIVE(S): 8.1: Support effective implementation of MPAs consistent with the Marine Life Protection Act (MLPA) through strategic partnerships. 8.2 Coordinate MLPA implementation with other ocean management agencies to improve management effectiveness.

EXHIBITS

~~Exhibit A: Los Cerritos Wetlands Land Trust Restoration Project Maps and Graphics~~
Exhibit B: WILDCOAST Restoration Project Maps and Graphics
Exhibit C: UC Santa Barbara Restoration Project Maps and Graphics
Exhibit D: Letters of Support

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 Ocean Protection Act.
> 2) The proposed projects are consistent with the adopted State Water Resource Control Board's Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling.
> 3) Funding for the proposed projects will be provided upon appropriate completion of the Notice of Exemption under the California Environmental Quality Act and after OPC staff and legal counsel accept the findings."

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

> "The California Ocean Protection Council hereby approves the disbursement of up to the following amounts to the following grantees:
>
> - ~~$607,500 to the Los Cerritos Wetlands Land Trust to restore 6.5 acres of coastal salt marsh habitat in the Lost Cerritos Wetlands;~~
> - $1,081,062 to WILDCOAST to restore 42 acres of degraded wetland habitat surrounding two MPAs in San Diego County; and
> - $1,693,582 to the University of California Santa Barbara to restore impacted rockweed populations from Big Sur to San Diego and including the Channel Islands.
>
> This authorization is subject to the condition that prior to disbursement of funds, all of the grantees referenced above shall submit for the review and approval by OPC's Executive Director 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."

PROJECT SUMMARIES:

These restoration projects aim to offset the harmful effects to marine and estuarine life resulting from once-through cooling, consistent with OPC's Once-Through Cooling Interim Mitigation Program.[1] ~~The first project will restore 6.5 acres of coastal salt marsh habitat in the Los Cerritos Wetland adjacent to two once-through cooling (OTC) generating plants and near two marine protected areas - Bolsa Bay and Bolsa Chica Basin. This project also includes monitoring programs to help inform future restoration efforts across Southern California as power plants cease OTC operations.~~ The second project will restore 42 acres of degraded wetland habitat surrounding the Batiquitos Lagoon and San Dieguito Lagoon MPAs. The third project will restore impacted rockweed populations – a high priority species for conservation that supports the foundation and ecosystem health of rocky intertidal habitats – from Big Sur to San Diego, including the Channel Islands.

In fall of 2018, OPC released a solicitation for restoration proposals for up to $3.4 million. Seven proposals requesting over $10 million in total were thoroughly considered by a review panel made up of ocean and wetland restoration experts, researchers, and state agency representatives with jurisdictions or permitting authorities regarding restoration activities. The ~~three~~ two projects being presented to the Ocean Protection Council are the highest scoring proposals and are recommended for funding by the review panel based on their alignment with the State Water Resources Control Board's OTC policy, scientific validity, community engagement, and potential to increase marine life associated with MPAs and make a lasting positive impact on the marine environment.

More detailed project summaries follow below.

BACKGROUND:

Once-through cooling technology pulls water from the ocean to cool coastal power plants. Marine animals, seaweeds, and billions of eggs and larvae of fish and invertebrates are taken in with the seawater and killed as they are subjected to thermal, physical, and/or chemical stresses. Larger organisms may also be pinned against seawater intake screens, causing injury or death. These impacts contribute to the decline of fisheries and the degradation of marine habitats near power plants using once-through cooling. To address these damaging impacts, the State Water Resources Control Board established the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling Policy (Policy) in 2010 requiring power plants to stop using OTC technology.[2] Until power plants transition to less harmful cooling systems, the policy requires power plant owners

[1] http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20171101/Item6_OTC_November_1_FINAL.pdf
[2] https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/otcpolicy_2017.pdf

and operators to make mitigation payments to the state of California to support projects that will offset negative ecological effects and increase in marine life associated with MPAs in the geographic area of the facilities. OPC receives up to $5.4 million annually from the payments made by the ten power plants still using OTC technology until they come into compliance with the policy.

To offset the negative impacts of OTC on coastal environments, California's MPAs must be ecologically functioning as a network, which requires effective MPA management. OPC's Once-Through Cooling Interim Mitigation Program (Program) prioritizes mitigation payment investment through four categories to ensure effective management of the MPA network: 1) enforcement, 2) outreach and education, 3) research and monitoring, and 4) restoration. The projects recommended herein address two of the Program's priority investment categories to ensure effective management of the MPA network: restoration that increases marine life in the geographic region of the facilities, and research to establish and quantify the expected ecological benefits to the MPA network, and to understand what additional mitigation may be required to offset OTC impacts.

PROJECT DESCRIPTIONS:

~~3.b.1: $607,500 to the Los Cerritos Wetlands Land Trust to restore 6.5 acres of coastal salt marsh habitat in the Los Cerritos Wetlands~~

~~The Los Cerritos Wetlands Land Trust (Land Trust) proposes a five-year project to restore 6.5 acres of coastal salt marsh habitat in the Los Cerritos Wetlands. The restoration project will be located at Zedler Marsh, a tidal wetland connected to the San Gabriel River by a 36-inch-wide culvert. This marsh, and the surrounding areas, have been exposed to warm water effluent released by two OTC generating stations - AES Alamitos and Department of Water and Power (DWP) Haynes – which are still using OTC today but are on a plan to cease operations in 2020 and 2029 respectively and come into compliance with the Policy. This project will restore the heavily degraded wetland habitat located directly adjacent to the generating stations to a functioning estuarine ecosystem. The Los Cerritos Wetlands are uniquely located within the vicinity of several ecologically significant MPAs, including Bolsa Bay, Bolsa Chica Basin, Abalone Cove, Point Vicente, and MPAs off Catalina Island. The healthy wetland habitat that will be created through this restoration project in the interstices between these MPAs will provide shelter and improved food supply to increase and support populations of marine fish, birds, and invertebrates that spill over from or are transiting to the nearby MPAs.~~

~~This project directly addresses recommendations of the Ocean Protection Council's Science Advisory Team (OPC-SAT) because wetland restoration will result in increased biodiversity, native species density and population size, and ecosystem function[3]. Tidal wetlands in southern California are small and relatively scarce, and the opportunities for protecting and enhancing tidal wetlands in southern California are limited. Where opportunities exist, protection and enhancement of these wetlands are a high priority given the critical role this habitat plays in maintaining ecosystem function and health of coastal and marine environments.~~

~~The project also includes an ecological monitoring program that will document its success, as well as the ongoing impacts of the AES Alamitos and DWP Haynes generating stations. Water quality monitoring efforts will measure dissolved oxygen, temperature, salinity, turbidity, and pH within Zedler Marsh and at three locations in the San Gabriel River. Water quality monitoring is essential to understanding how conditions in the river will change when AES Alamitos ceases OTC operation in 2020 and will inform what can be expected and how to best plan for when DWP Haynes ceases OTC operation in 2029.~~

~~Though the effluent by the power plants has many detrimental effects on the wetland habitat, the consistent warm water being discharged has attracted the Pacific green sea turtle to make the San Gabriel River its northernmost known home. Since 2011, the Aquarium of the Pacific has partnered with the Los Cerritos Wetlands Authority to learn more about this population of sea turtles and how the OTC operations are affecting them through a citizen science initiative called the Southern California Sea Turtle Monitoring Project[4]. Funding for the Los Cerritos wetlands restoration project will help continue the sea turtle monitoring project, which takes place monthly along a 2-mile stretch of the San Gabriel River. It is not yet clear how OTC influences population dynamics of this federally-threatened species, and thus the continued monitoring as OTC practices diminish is critical. The Los Cerritos wetlands restoration project also includes a marine fish, bird, and invertebrate monitoring program led by Dr. Christine Whitcraft's Ecology Lab at CSU Long Beach to determine how these animal communities utilize the Los Cerritos Wetlands and how they might be contributing to the nearby MPAs located in Palos Verdes, Catalina Island, and the Orange County coast.~~

~~In addition, the project incorporates elements to benefit neighboring communities. The project is immediately adjacent to a senior citizen community in Seal Beach, where residents can benefit from the Land Trust's existing nature walk programs and volunteer their time to assist with plant propagation. Students from the Long Beach School District,~~

[3] http://www.opc.ca.gov/webmaster/OST-Ocean-Restoration-Methods-Final-HighRes.pdf
[4] https://www.aquariumofpacific.org/conservation/sea_turtle_monitoring

of which 67% qualify for the Free and Reduced-Price School Lunch Program[5], will be transported to the Los Cerritos Wetlands from their schools through the Land Trust's matching funds dedicated to their school year programming. During this time, students will get to see restoration occurring firsthand at the site and will learn about the importance of environmental stewardship. Finally, the Land Trust will partner with the Conservation Corps of Long Beach to match funding to construct a trail system to walk along the wetlands. The Conservation Corps is focused on workforce education and training for at-risk youth through work, service, conservation and education.

About the Grantee:

The Los Cerritos Wetlands Land Trust is a non-profit organization founded in 2001 with the goals of facilitating the purchase of privately owned properties in the Los Cerritos Wetlands, reconnecting and restoring this remnant estuary ecosystem, providing an educational setting for people in underserved communities to discover the wonders of southern California's coastal wildlands, and building a culture of public stewardship for this precious resource. The Land Trust holds a Memorandum of Agreement with the Los Cerritos Wetlands Authority and has used this agreement to restore 12 acres of Zedler Marsh over the past 10 years, including hosting over 250 public restoration events. The Land Trust Executive Director and contractors with the Land Trust will help carry out the projects.

The Land Trust's long-time partner, Tidal Influence, has been working on restoration projects in the Los Cerritos Wetlands since 2009 and is the main ecological consultant that the Land Trust contracts with for assistance in organizing, managing, and carrying out habitat restoration projects, and hosting environmental education programs. Tidal Influence is the Land Manager for the Los Cerritos Wetlands Authority and acts as the Los Cerritos Wetlands Stewardship Program Coordinator. They operate the native plant nursery at Zedler Marsh and run an internship program for students from nearby CSU Long Beach. Tidal Influence's 8-person staff will conduct water quality and biological monitoring, grow and coordinate the installation of vegetation, and host all volunteer and educational programming that will accompany this project. Dr. Christine Whitcraft's Wetlands Ecology Lab at CSU Long Beach will conduct invertebrate monitoring, which is the lab's specialty. The Aquarium of the Pacific will continue their involvement with sea turtle monitoring, and Tidal Influence will assist them when needed.

Project Timeline:

This is a five-year project expected to end by March 2024.

[5] https://broadfoundation.org/wp-content/uploads/2016/03/1177-tbp2008longbeachfactsheet.pdf

3.b.2: $1,081,062 to WILDCOAST to restore 42 acres of degraded wetland habitat surrounding two MPAs in San Diego County

This project would involve restoration of 42 acres of degraded wetland habitat surrounding two MPAs in San Diego County – Batiquitos Lagoon and San Dieguito Lagoon. WILDCOAST will oversee all project components including: planning; data collection; volunteer recruitment and training; invasive plant treatment and removal; installation of native trees, plants and grasses; and ongoing habitat maintenance. The restoration plan includes planting over 150 native riparian and oak woodland trees such as coast like oak, western sycamore, blue elderberry, and the critically endangered Torrey pine. The plan also includes the planting of over 200 coastal scrub plants such as mugwort, gooseberry, rose, and milkweed.

Adhering to specific recommendations made by the OPC-SAT report, the project aims to enhance the integrity of these natural wetland ecosystems through efforts focused on increasing marine life at the community level rather than the species level, which generally has broader effects[6]. The project aims to restore and maintain access to acres of disturbed coastal sage scrub, salt marsh, and riparian habitat through clean-ups, exotic plant removal, and native plantings with a focus on full ecosystem improvement rather than single species benefit.

Batiquitos and San Dieguito Lagoon MPAs provide habitat for an abundance of wildlife that depends on open space areas throughout the region. Many bird, fish, and other wildlife species rely on healthy lagoon functions that will be enhanced through this project. By protecting and improving the habitat where these species nest, feed, and rest, this project helps regional populations of endemic wildlife as well as migratory species that span a much broader region. By enhancing the integrity of the lagoons, surrounding watersheds, and coastal ecosystems, the project can provide meaningful ecological benefits beyond the actual restoration site.

In addition to increasing marine life associated with the neighboring MPAs, the conservation of the wetlands and riparian habitats adjacent to Batiquitos Lagoon and San Dieguito Lagoon will help sustain an ecologically healthy coastline across the San Diego County region and will have watershed-wide benefits that extend to inland habitats and communities. The conservation of these sites enhances the ecosystem services that they,

[6] http://www.opc.ca.gov/webmaster/OST-Ocean-Restoration-Methods-Final-HighRes.pdf

and other coastal wetlands across the region, provide including carbon sequestration[7], buffering against sea level rise and storm surge[8], filtration of sediments and pollutants[9], and opportunities for outdoor community engagement. Thus, this project offers a natural regional solution to climate change adaptation.

Anticipated outcomes of the project include but are not limited to: increasing marine life associated with the neighboring MPAs; restoring the integrity of these natural wetland ecosystems; improving capacity for the wetland systems to respond to climate change and maintain healthy ecosystem functions; and enhancing wetland ecosystems to be highly resistant and resilient to anthropocentric disturbances over time. San Diego County, once home to more than half of estuarine habitat in the Southern California Bight, has lost approximately 31% of its wetlands in the past century[10]. Fortunately, the County has four wetlands protected as MPAs. The increased ecosystem integrity expected as an outcome of this restoration project will further enhance the MPAs' ability to protect marine and estuarine organisms by providing shelter and food sources to increase marine life.

In addition to the ecological benefits this restoration effort will provide, the project also includes outreach and education opportunities to help improve compliance with MPA regulations and thus further increase marine life associated with MPAs. The project incorporates public outreach through signage and materials, stewardship opportunities lead by local tribes, and field trips for students from underserved and park-poor communities to work toward improving compliance of MPA regulations. The project will also create public access trails allowing the community to engage with and study restored marine life from appropriate distances to minimize and eliminate inappropriate take of marine organisms.

San Dieguito and Batiquitos Lagoon MPAs have approximately 10 regulatory signs and interpretive panels located around their boundaries. This project will include the ongoing maintenance of these signs, replacement of damaged or missing signs, and new signage needs that may be identified. All new regulatory signs and interpretive panels will follow the approved California Department of Fish and Wildlife (CDFW) standardized template. Content related to local tribes and cultural history will be included and developed in conjunction with the San Diego County MPA Collaborative Southern California Tribal Chairman's Association (SCTCA) representative and will be presented to the SCTCA for approval.

[7] https://www.openchannels.org/news/mpa-news/how-mpas-can-help-mitigate-impacts-climate-change-coastal-blue-carbon-%E2%80%9Cfish-carbon%E2%80%9D
[8] https://coast.noaa.gov/applyit/wetlands/prioritize.html
[9] https://www.epa.gov/wetlands/incorporating-wetland-restoration-and-protection-planning-documents
[10] https://www.sfei.org/projects/SoCalTSheets_2#sthash.zoEZRKvF.37bMUwLv.dpb

The project will also leverage ongoing WILDCOAST programming for MPA stewardship projects for students from park-poor communities and tribes across San Diego County. Included in this project is support for the annual Batiquitos Lagoon Kayak Cleanup Days - a stewardship event that allows volunteers access to the lagoon via kayak to conduct trash cleanups. A major focus of the event is the participation of students from disadvantaged communities in south San Diego County, El Cajon, and Valley Center and students from San Diego County tribes. Since 2017, approximately 50 students from these communities have participated in the event. This experience is part of WILDCOAST's Explore My MPA project that facilitates MPA stewardship and engagement opportunities in San Diego County. Finally, the project will also employ Conservation Corps labor and resources. As a state training program for young adults, the Corps offers on-the-job training and work experience for their program participants, men and women between the ages of 18-25. Corps-members are offered the chance to complete their high school diploma through independent Conservation Corps schools and are encouraged to seek higher education or vocational training.

About the Grantee:
WILDCOAST/COSTASALVAJE is a non-profit organization with an international team that conserves coastal and marine ecosystems in the United States, Mexico, and Cuba. The United States office is located in San Diego. With WILDCOAST's experience coordinating restoration projects since 2000 in the Tijuana River Valley and more recent programs to strengthen MPA management in California (including serving as co-chair of the San Diego MPA Collaborative) and engage youth from park-poor communities and local tribes in MPA stewardship, the organization is well-positioned to carry out and complete the project. WILDCOAST will work closely with Batiquitos Lagoon Foundation (BLF) and San Dieguito River Valley Conservancy (SDRVC). BLF has successfully administered city, state, and federal grants involving consultants and has all equipment needed for restoration activities in the Batiquitos Lagoon. BLF also has an active Memorandum of Agreement and agreement with CDFW and Conservation Corps. SDRVC employs a full time Executive Director, Conservation Manager, and Education Manager to support implementation of this project and has the necessary equipment, tools, and supplies to implement the projects in the San Dieguito Lagoon.

Project Timeline:
This is a four-year project expected to end by December 2023.

3.b.3 $1,693,582 to the University of California Santa Barbara to restore impacted rockweed populations from Big Sur to San Diego and including the Channel Islands.

UC Santa Barbara proposes to restore impacted rockweed populations from Big Sur to San Diego, including the Channel Islands. This project is one of the first large-scale restoration efforts in rocky intertidal habitats in California. Along the coast of California, particularly in densely populated areas such as urbanized Southern California, these ecosystems have been significantly altered and degraded[11]. The decline of habitat-forming rockweed, including within MPAs, is of special concern: rockweed is an important source of food to grazers such as the endangered black abalone, and also serves as a nursery and feeding grounds for larval and juvenile fish, potentially contributing to the success of local MPA fish enhancement. The restoration plan is designed to provide ecosystem-wide benefits across the span of geographic areas impacted by OTC, including at least five Channel Island sites, five Central Coast sites, and five South Coast sites (see Exhibit C). The goals of this restoration project include: 1) restoring impacted rockweed across a broad spatial region in California to achieve stable and persistent populations that provide key ecosystem functions and benefits to rocky intertidal ecosystems; and 2) quantitatively evaluating the success of the restoration and cascading effects on intertidal communities.

The decline of rockweed in California are likely driven by a combination of multiple factors, including trampling by people, pollution caused by increased urbanization, and long-term climate change. However, there are healthy populations that still exist throughout the proposed project region. The presence of these widespread resilient populations, along with the demonstrated success of previous smaller-scale restoration efforts, indicate that this project will result in successful rockweed restoration. Given the ecological services rockweed provides, effective restoration can enhance the rocky intertidal in general and thus contribute to an increase in marine life associated with MPAs impacted by OTC. Further, the efforts taken can serve as a blueprint for future restoration efforts in California.

While large-scale restoration in rocky intertidal habitats is in its infancy with few examples of tested approaches, methods for successfully restoring rockweed have been identified through rigorous empirical testing. The grantees and sub-grantees at UC Santa Barbara, UCLA, UC Santa Cruz, and Cal Poly Pomona have been at the forefront of this work. This project will utilize proven techniques including transplanting groups of rockweed onto

[11] Gerrard AL (2005) Changes in the rocky intertidal floras along the Palos Verdes peninsula (Los Angeles County) since E.Y. Dawson's surveys in the late 1950s. M.S. Thesis, California State University, Fullerton, CA. https://search.proquest.com/openview/55b84a4d1201e5d666efdd7d61038ef5/1?pq-origsite=gscholar&cbl=18750&diss=y

rocky surfaces with a non-toxic glue and will also test the effectiveness of new approaches such as naturally seeding the substratum by relocating fertile rockweed.

To monitor survival, growth, and overall restoration progress, proven intertidal survey techniques will be used in combination with cutting-edge unmanned aerial vehicle (UAV) mapping. To map changes in rockweed abundance over a larger area, UAV flights will be conducted at low elevation to collect images which will then be analyzed to measure the total areal coverage of rockweed in each image. Environmental data including temperature, rock type, exposure, and aspect will be recorded at each site to be used as explanatory variables in analyses.

Results will be communicated publicly through various presentations and scientifically through conferences and peer-reviewed articles. All metadata collected will be uploaded to the California Natural Resources Agency Open Data Platform to be made available to the public.

This project will provide opportunities to students from ethnically and culturally diverse backgrounds, including those from disadvantaged communities. The principle investigators (PIs) have incorporated plans to involve diverse university students, including underrepresented students whenever possible, throughout this project during the rockweed restoration implementation and subsequent monitoring phases. This will include recruiting National Science Foundation Research Experience for Undergraduates fellows through the Ocean Global Change site at UC Santa Barbara[12], which provides research and science communication experiences undergraduates from underrepresented groups in STEM, at institutions ranging from community colleges to 4-year liberal arts colleges.

The diverse affiliations of partners on this project exemplify cross-regional collaboration. The PIs have extensive experience conducting research and monitoring at dozens of locations along the California coastline, and have fostered strong relationships with resource agencies and stakeholders providing a partnership network that will be crucial to the success of this project. To restore sites on the Channel Islands, the PIs have begun working with the National Park Service (NPS), the Channel Islands National Marine Sanctuary, and The Nature Conservancy. In Southern California, the Department of Defense (U.S. Navy), local MPA Collaboratives, city authorities, aquariums, and other stakeholders support this restoration plan. Restoration of the proposed sites in the Point Conception region will include the support of The Nature Conservancy and Hollister Ranch. The PIs are collaborating with the UC Natural Reserve System and Department of Defense

[12] https://oceanchangereuucsb.com

in the Central California sites. This project will leverage ongoing research, monitoring and outreach relationships from a network of local, state, federal, and NGO associations such as the Multi-Agency Rocky Intertidal Network (MARINe), Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), CDFW's MPA Monitoring Program, and more.

About the Grantee:
Though UC Santa Barbara is the lead grantee for this project, the PIs and partners represent a broad consortium of academic institutions and government agencies. Partners will include federal agencies (NPS, the National Oceanic and Atmospheric Administration, Bureau of Ocean Energy Management), scientific consortiums (MARINe), and local NGOs. Collectively, the PIs have extensive experience managing large grants and conducting research and restoration in rocky intertidal ecosystems. Dr. Robert Miller of UC Santa Barbara is an expert in macroalgal ecology and physiology and will serve as the lead PI for this project. Dr. Pete Raimondi of UC Santa Cruz is also currently leading an effort to restore rockweed populations in the San Francisco Bay. Dr. Rich Ambrose of UCLA has decades of experience in restoration ecology. Dr. Jayson Smith of Cal Poly Pomona is a PI on the BOEM-funded long-term intertidal monitoring program. Stephen Whitaker has directed the Channel Islands NPS Intertidal Monitoring Program for 10 years. Together with Dr. Smith, Mr. Whitaker developed the original methods for rockweed restoration.

PROJECT FINANCING

Staff recommends that the Ocean Protection Council authorize encumbrance of up to ~~$3,382,144~~ $2,774,644 in total to the three organizations listed below to support restoration projects that increase marine life associated with MPAs in the geographic region of the OTC facilities and enhance MPA research and public outreach efforts:

~~Los Cerritos Wetlands Land Trust~~	
~~Ocean Protection Council~~	~~$607,500~~
~~Matching funds~~	~~$307,500~~
WILDCOAST	
Ocean Protection Council	$1,081,062
Matching funds	$6,500
UC Santa Barbara	
Ocean Protection Council	$1,693,582
OPC FUNDS TOTAL	~~$3,382,144~~ $2,774,644
OVERALL TOTAL	~~$3,696,144~~ $2,781,144

The anticipated source of funds will be from Once-Through Cooling Interim Mitigation Program funds that are deposited into the Ocean Protection Trust Fund. These funds are derived from payments made by power plants still using OTC technology as mitigation until they come into compliance as mandated by the State Water Resources Control Board's Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling.

Leverage of OPC Funds

~~***Los Cerritos Wetlands Land Trust:*** This project leverages $307,500 secured by the Land Trust through in-kind contributions and volunteer time, as well as matching funds from Los Angeles County Measure A, Measure, O, and Measure M, Honda, and California Department of Fish and Wildlife Office of Spill Prevention and Research Environmental Enhancement Fund. Volunteers from the local community will be heavily involved in the restoration portion of this project as well as a labor force from the Conservation Corps of Long Beach. The Land Trust also has the backing and partnership of the Aquarium of the~~

~~Pacific and California State University, Long Beach in this project, who are involved with the sea turtle monitoring program, and invertebrate community monitoring programs, respectively. The Los Cerritos Wetlands Authority's Technical Advisory Committee is providing input from the planning through final design phase of this project. The Gabrieleño Band of Mission Indians - Kizh Nation, who hold ancestral claims to the land in and surrounding the Los Cerritos Wetlands, have provided their input and have given support for restoration activities in the Los Cerritos Wetlands. The Advisory Committee and the Kizh Nation will continue to be consulted as the project progresses.~~

WILDCOAST: This project leverages $6,500 of matching funds secured from the California Coastal Conservancy, the California Coastal Commission, and the Batiquitos Lagoon Foundation. It builds off 2018 and 2019 restoration efforts in San Dieguito and Batiquitos Lagoon SMCAs. Portions of the Lower Brigantine Basin were restored by the SDRVC and their volunteers in 2018 and 2019 and was funded by SDRVC foundation support. In 2018-2019, SDRVC and volunteers installed 260 containers of native riparian, native coastal sage scrub, coast live oak woodland shrub species, and coast live oak woodland tree species within an upstream portion of the Gonzales Canyon Open Space Preserve. With funding from State Coastal Conservancy, the BLF acquired 18.2 acres of habitat at Chollas Point that will be restored through the project.

UC Santa Barbara: This project leverages the principal investigators' (PIs') broad network to increase the project outcomes while minimizing project costs by using: 1) ongoing monitoring of rockweed and intertidal communities at collocated Multi-Agency Rocky Intertidal Network (MARINe), Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), and NPS sites; 2) outreach, education, and citizen science efforts with established non-profit organization programs; and 3) established data management infrastructure such as MARINe and the Santa Barbara Coastal Long Term Ecological Research Project.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:

The proposed projects are 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:

- Improve management, conservation, and protection of coastal waters and ocean ecosystems.
- Provide monitoring and scientific data to improve state efforts to protect and conserve ocean resources.
- Protect, conserve, and restore coastal waters and ocean ecosystems, including acquisition from willing sellers of vessels, equipment, licenses, harvest rights,

permits, and other rights and property, to reduce threats to ocean ecosystems and resources.

- Provide funding for adaptive management, planning, coordination, monitoring, research, and other necessary activities to minimize the adverse impacts of climate change on California's ocean ecosystem

In addition to restoring degraded coastal and ocean habitats, these projects continue to support the diverse statewide network of scientists, tribes, fishermen, citizen scientists, educators, and federal and state managers that are actively engaged in ensuring the state's MPA network being managed according to the goals of the MLPA. These projects will increase capacity to sustain and advance momentum toward successful adaptive management of the MPA network statewide.

CONSISTENCY WITH OPC'S STRATEGIC PLAN:
These projects implement Focal Area C: Sustainable Fisheries and Marine Ecosystems. Specifically, these projects will support effective management and implementation of MPAs consistent with the Marine Life Protection Act through partnerships between State agencies and their stakeholders.

CONSISTENCY WITH OPC'S GRANT PROGRAM FUNDING GUIDELINES:
The proposed projects are consistent with the OTC Interim Mitigation Program's plan as presented at the November 1, 2017 OPC meeting[13]. The projects are also consistent with the priorities that are identified on the OTC Interim Mitigation Program Award Guidelines which were approved by the Council at the October 25, 2018 OPC meeting[14].

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):
Staff has determined, and therefore recommends the Council find that the proposed projects are categorically exempt from CEQA pursuant to Title14 of the California Code of Regulations, pursuant to sections15301 (Existing facilities and maintenance) 15303 (Small Construction), 15307 (actions taken by regulatory agencies for restoration or enhancement), 153061 (the common sense exemption), and that Notice of Exemptions are filed upon approval of funding.

[13] http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20171101/Item6_OTC_November_1_FINAL.pdf
[14] http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20181025/Item4c_OTCAwardGuidelines-Staff-Rec_FINAL.pdf