

Department of Biological Sciences, 1250 Bellflower Blvd., Long Beach CA 90840

Tova Handelman, CA Ocean Protection Council 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Ms. Handelman,

I am writing in support of the Los Cerritos Wetlands Land Trust's (LCWLT) grant proposal to the Ocean Protection Council's Once-Through Cooling Interim Mitigation Grant Program. I am an associate professor and wetland ecologist in the Biological Sciences Department and Environmental Science and Policy (ESP) Program at California State University Long Beach (CSULB).

Los Cerritos Wetlands are less than 1 mile from the CSULB campus, and I have been waiting for an opportunity to get my research lab involved with investigating this unique estuarine habitat. The proximity of Los Cerritos Wetlands to a once-through-cooling operations is intriguing and will allow exploration of numerous ecological questions especially when considering the future restoration of this wetlands complex. Our lab specializes in salt marsh invertebrate monitoring and funding from the Ocean Protection Council will allow for my students and I to assist LCWLT with implementing their proposed ecological monitoring program.

Not only will this project include the ecological monitoring but will also facilitate the installation of over 15,000 native plants and enhancement of 6.5 acres of salt marsh habitat. This project has been designed to accommodate future sea level rise, and much of the project will be implemented through community-based programs that will enhance the public's awareness of this urban wetland. In addition, I intend to encourage students from both the Department of Biological Sciences and the ESP Program to get involved as volunteers.

Coastal salt marshes serve numerous functions and one of the most important functions is as a nursery for marine life. The organisms served by this project will have the ability to populate nearby Marine Protected Areas.

As a nearby resident, educator and wetlands ecologist, I have been a long-time supporter of efforts to restore and rehabilitate these degraded coastal wetlands. I am very pleased with the progress that has been made over the past years, and I hope to see the wetlands flourish with funding from the Ocean Protection Council. Please let me know if you have questions or need additional information.

Sincerely,

Christine Whiteralt

Christine Whitcraft (Assoc. prof, cwhitcra@csulb.edu)

## Batiquitos Lagoon Foundation

Preserve, Protect, and Enhance



January 31, 2019

Tova Handelman, Marine Protected Areas Program Manager California Ocean Protection Council 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Ms. Handelman,

On behalf of the Batiquitos Lagoon Foundation (BLF), I am writing to express our strong support and commitment to WILDCOAST's application for funding through California Ocean Protection Council's Once-Through Cooling Interim Mitigation Program. With this support, WILDCOAST, and its project partners, the San Dieguito River Valley Conservancy and BLF, in addition to other collaborators, will have tremendous long-term positive impacts on natural resources and communities that are important to Outdoor Outreach. Their San Diego County Marine Protected Area Wetland Restoration Project will noticeably benefit an array of wildlife, important ecosystem services and resiliency, in addition to providing opportunities for local communities, youth, and visitors.

With somewhere between 50 and 90 percent of Southern California's wetlands gone, it is critical that those that remain are not only protected, but also restored. This project builds upon solid protections in place for two important San Diego County wetland marine protected areas, or MPAs, the San Dieguito and Batiquitos Lagoon State Marine Conservation Areas, by restoring and planning the restoration of degraded wetland, riparian, canyon, and salt marsh habitats located around their boundaries. This project also includes an opportunity to provide deeper engagement with communities and students from park-poor areas and local tribes directly in MPA and wetland stewardship, recreation, and education.

Outdoor Outreach has had the pleasure of working with WILDCOAST and their partners on many student engagement projects over the years, including community science and experiential learning activities in local wetland MPAs. The outdoor opportunities provided by these places and the programming that WILDCOAST, Outdoor Outreach, and other partners have carried out, have been transformative experiences for many of our students. While most walk away with a great appreciation and awareness of San Diego County wetland MPAs, some have continued involvement in their protection through various stewardship roles.

The enhancement of these incredible places, and the other opportunities that this project affords, are greatly needed to ensure a healthy, thriving, and resilient coastline for current and future generations. I very strongly encourage you to fund this important opportunity.

Sincere Fred C. Sandquist

President and Board Member



January 30, 2019

Tova Handelman, Marine Protected Areas Program Manager California Ocean Protection Council 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Ms. Handelman,

I am writing in strong support of WILDCOAST's application for funding through California Ocean Protection Council's Once-Through Cooling Interim Mitigation Program. With this support, WILDCOAST, will have tremendous long-term positive impacts on natural resources and communities that are important to our Girl Scouts. Their San Diego County Marine Protected Area Wetland Restoration Project will noticeably benefit an array of wildlife, important ecosystem services and resiliency, in addition to providing opportunities for local communities, youth, and visitors.

It is critical that San Diego County wetlands are restored. This project will help achieve this by restoring and planning the restoration of degraded wetland, riparian, canyon, and salt marsh habitat in the region. This project also includes an opportunity to provide deeper engagement with communities and students from park poor areas and local tribes directly in MPA and wetland stewardship, recreation, and education.

The San Ysidro Girl Scouts have had the pleasure of working with WILDCOAST and their partners on many student engagement projects over the years, including community science and experiential learning activities in local wetland MPAs. The outdoor opportunities provided by these places and the programming that WILDCOAST has carried out, have been transformative experiences for many of our girls. While most walk away with a great appreciation and awareness of San Diego County wetland MPAs, some have continued involvement in their protection through various stewardship roles.

The enhancement of these incredible places, and the other opportunities that this project affords, are greatly needed to ensure a healthy, thriving, and resilient coastline for current and future generations. I encourage you to fund this important opportunity.

Sincerely,

Irene Barajas Leader Group 5912 Girl Scouts San Diego Imperial Council



Leader: Irene G. Barajas 567 Blackshaw Lane • San Ysidro, CA 92173 Phone: 619-662-0400 • Mobile: 619-851-2567 • email: irenegbarajas@yahoo.com



January 19, 2019

## To California Ocean Protection Council:

Laguna Ocean Foundation (LOF; www.lagunaoceanfoundation.org) is writing on behalf of PIs Miller, Whitaker, Ambrose, Raimondi, and Smith to express full support of their proposal entitled "Restoring rocky intertidal foundation species across California." LOF is a non-profit organization that strives to optimize the health and sustainability of Laguna Beach's vital coastal ecosystems through science, education, and community involvement. Laguna Beach is rich with longstretches of diverse rocky intertidal habitat that is a particular focus of our conservation efforts. We recognize the importance of rockweeds as a foundation species for maintaining natural rocky intertidal ecosystem functioning and driving community structure. We support efforts to restore these seaweeds in Laguna Beach and other locations along the California coast. We believe rockweed restoration will not only have large, positive impacts on overall rocky intertidal health but will also result in improved experiences for the large number of naturalists, school groups, and local and international visitors that frequent these habitats along our coast. LOF manages a tidepool education program, consisting of docents and paid educators that perform outreach to rocky intertidal visitors during low tides. We are excited with the possibility of assisting with disseminating information about the project to public visitors as part of our outreach program in addition to providing assistance in restoration efforts in Laguna Beach using LOF volunteers from our educator programs.

Sincerely yours,

E. Ahmanya

Ed Almanza, Vice Chair Laguna Ocean Foundation



January 22, 2019

Subject: Letter of Support for Miller, et al. proposal entitled "Restoring rocky intertidal foundation species across California"

To California Ocean Protection Council:

The Orange County Marine Protected Area Council (OCMPAC) is a regional California MPA Collaborative that includes local city and county officials, institutional representatives, environmental consultants, academic faculty, and nonprofit organizations with a mission to manage, and conduct research and educational outreach in the Marine Protected Areas (MPAs) of Orange County. OCMPAC supports the efforts of Robert Miller (UCSB), Jayson Smith (Cal Poly Pomona), Stephen Whitaker (UCSB/NPS), Peter Raimondi (UCSC), and Richard Ambrose (UCLA) and their proposal for restoration of ecologically important rockweeds in rocky intertidal ecosystems along the California coast, including within local MPAs. Rockweeds play an integral role in ecosystem function and driving of intertidal community composition with restoration of this declining species being vital in improving rocky intertidal condition, particularly within MPAs as per the goal of our collaborative. OCMPAC will be engaged in the restoration project through cooperation and communication with OCMPAC member Jayson Smith and will encourage the restoration team to be active in public outreach efforts for the project within our program.

Bornia Villanera

Bernice Villanueva Co-Chair Orange County Marine Protected Area Council www.ocmarineprotection.org



January 17, 2019

To Whom It May Concern:

The Cabrillo Aquarium strongly supports the CA Ocean Protection Council proposal, "Restoring rocky intertidal foundation species across California." Our mission is to inspire exploration, respect and conservation of Southern California marine life. We strive to educate the public and foster appreciation for all marine ecosystems including the rocky intertidal. Southern California rocky intertidal ecosystems have been degraded as the intensity of anthropogenic activity in the region has increased. The widespread decline of rockweed algal species represents one of the most concerning changes in the rocky intertidal since these canopy-providers modify the habitat providing shade and protection for numerous species.

Our organization is committed to conservation education and we are acutely aware of the research that has documented the impact that pollution, habitat loss, overfishing and climate change have had on our marine environment. We fully endorse activities, such as rockweed restoration, that attempt to reverse the detrimental effects that humans have exerted on our planet. Given the ecological role rockweeds have in rocky intertidal communities, the knowledge that they have declined markedly and they exhibit slow and unpredictable recovery, it is understandable that active restoration is necessary to expedite recovery of tidepools.

The Cabrillo Beach Coastal Park includes a long-term rocky intertidal monitoring site, Point Fermin Tidepools. It is our understanding that the habitat adjacent to this site is one of the locations proposed for restoration. We are excited about the prospects of implementing rockweed restoration here and other locations that have been impacted throughout California. This proposed project aligns directly with our educational and outreach programs for individuals and families (i.e. Science at the Seashore) as well as our Sea Search Marine Biology school programs. The ongoing efforts and results of this proposed restoration project will be integrated into our outreach to both the public and school groups.

Please let us know if we can be of further assistance.

Sincerely,

Julianne Kalman Passarelli, Ph.D. Exhibits and Collections Curator Cabrillo Marine Aquarium

3720 STEPHEN M. WHITE DRIVE • SAN PEDRO, CALIFORNIA 90731 PHONE 310-548-7562 • FAX 310-548-2649 • www.cabrillomarineaquarium.org A FACILITY OF THE CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS WITH SUPPORT FROM FRIENDS OF CABRILLO MARINE AQUARIUM





California Coastal and Marine Program 877 Cedar Street, Suite 242 Santa Cruz, CA 95017 (831) 234-2942

January 30, 2019

Dear Ocean Protection Council,

On behalf of The Nature Conservancy (TNC), I would like to express our strong support for the selection of the Once-Through Cooling Interim Mitigation Program Grant proposal, "Restoring rocky intertidal foundation species across California," led by PIs Miller (UCSB), Raimondi (UCSC), Ambrose (UCLA), Smith (CPP) and Whitaker (NPS) for funding by the Ocean Protection Council. The proposed work will not only restore rockweeds at important sites in California, but by tying into long-term monitoring will provide much needed information on rockweed dynamics and how best to restore and conserve these imperiled foundational species and the communities they support.

The proposed work aligns well with TNC research and projects. Firstly, our recent assessment, Conserving California's Coastal Habitats: A Legacy and a Future with Sea Level Rise found that 58% of the area of rocky intertidal throughout California is highly vulnerable to sea level rise. This finding highlights the urgent importance of planning and management actions now to conserve and restore this important habitat into the future. Secondly, The Nature Conservancy, CA is expanding our work on the management, restoration, and conservation of foundational habitats including seagrasses and kelp, which aligns well with the proposed work. Thirdly, we are researching components of wilderness along California's coast. We see our new Dangermond Preserve as a helpful reference site along a gradient of human use intensity, as well as an important sentinel site to monitor change along the California coast as climates change. Similarly, our long management of the wild coasts of Santa Cruz Island provide important reference sites among the islands and mainland gradient of human disturbance to coastal wilderness. We are interested in important research like this to be conducted in our preserves to enhance our understanding of ecological function in a changing climate and what restoration and management practices are best suited to ensure the conservation of these and other important coastal habitats.

In sum, TNC strongly supports the funding of this proposed project. Please feel free to contact me if you have any questions.

Walter Heady, Ph.D. Senior Coastal Marine Scientist

## bay restoration commission

STEWARDS OF SANTA MONICA BAY

santa monica bay restoration commission  $\swarrow$  320 west 4<sup>th</sup> street, ste 200; los angeles, california 90013 213/576-6615 phone  $\checkmark$  213/576-6646 fax  $\checkmark$  santamonicabay.org

January 30, 2019

Dear Ocean Protection Council:

On behalf of the Santa Monica Bay Restoration Commission (SMBRC), I am writing to express my enthusiastic support for the CA Ocean Protection Council proposal "Restoring rocky intertidal foundation species across California." The rocky intertidal zone is a vital component of the Santa Monica Bay. The proposed restoration project would significantly bolster the intertidal restoration activities in Santa Monica Bay and help us to achieve our goal to restore and protect rocky intertidal and subtidal habitats in the Bay.

The Santa Monica Bay Restoration Commission (SMBRC) was established by the California Legislature in 2002 to monitor, assess, coordinate, and advise the activities that affect the beneficial uses, restoration and enhancement of habitats in Santa Monica Bay and its watersheds. Most recently in December 2018, the Governing Board of the SMBRC adopted a new Action Plan that sets priority actions to address remaining challenges and newly emerging issues. One identified issue and recommended action was to devote more attention and resources to protection of rocky and sandy habitats in the intertidal zone of the Bay after decades of neglect.

Our most recent assessment of the Bay's habitat condition indicated that rockweeds were either absent or too rare in the Santa Monica Bay. Restoration of rockweeds would provide multiple benefits to the entire rocky intertidal community in the Bay, including increasing biodiversity and potentially reducing the proliferation of invasive species, particularly the macroalgae Caulacanthus okamurae that has become especially common in the South Bay. In addition, the proposed project would be very synergistic with re-introducing and restoring an abalone population, another priority action recommended in SMBRC's new Action Plan. Once abundant in the Bay, especially in the rocky intertidal zone on the Palos Verdes Peninsula, abalone (black, white, pink, and green) populations have declined rapidly and some of the species are now federally endangered. A thriving rockweed population would significantly enhance the prospects of reintroducing juvenile abalone, which are sensitive to desiccation stress that is alleviated by rockweed. Reintroduction and restoration of rockweed population under the proposed project will support not only the implementation of our Action Plan, but also the Abalone Recovery and Management Plan (ARMP) published by DFW which identifies the PV Peninsula as a priority restoration site that historically once supported a thriving abalone fishery.,



our mission: to restore and enhance the santa monica bay through actions and partnerships that improve water quality, conserve and rehabilitate natural resources, and protect the bay's benefits and values

## bay restoration commission STEWARDS OF SANTA MONICA BAY

santa monica bay restoration commission *V* 320 west 4<sup>th</sup> street, ste 200; los angeles, california 90013 213/576-6615 phone *V* 213/576-6646 fax *V* santamonicabay.org

We strongly endorse the need to restore rockweeds in California and particularly in Santa Monica Bay and urge you to award the grant to this project. Please feel free to contact me at 213-576-6639 (guangyu.wang@waterboards.ca.gov) should you have further questions.

Guangyu Wang Chief Administrative Director Santa Monica Bay Restoration Commission





**Biological Sciences** *College of Science* 

9 May 9, 2019

Dear Ocean Protection Council:

I am writing in support of the proposed work by Miller et al. titled "Restoring rocky intertidal foundation species across California." I am a restoration ecologist in terrestrial systems and have a long history of working on sound restoration programs that result in successful ecosystem enhancement. I recognize the importance of restoring foundation species in degraded habitats, such as that proposed by Miller et al. Restoring these species can result in cascading positive impacts on the community as a whole. I also commend the authors for their approach to restore multiple locations over such a large geographic region. In addition, this project is critical for the conservation of rockweeds, which are declining in California. My own work with declining and at-risk plant populations uses similar restoration and reintroduction methods to help sustain these populations into the future. I commend this research group for applying these ideas to coastal rockweed species.

The investigators have a long history of monitoring and conducting robust research in rocky intertidal ecosystems. Furthermore, I serve on a thesis committee with one of the investigator's (PI Smith) graduate students who is conducting experimental rockweed restoration and have confidence that Smith, and the rest of the authors, have the knowledge and background of rockweed restoration that will lead to long-term success. Thank you for considering my comments in your review of this proposal.

Erin Questad Associate Professor Department of Biological Sciences <u>ejquestad@cpp.edu</u>