Item 5c

Staff Recommendation
September 14, 2021

Marine Protected Area Long-Term Monitoring: California Collaborative Fisheries Research Program (CCFRP)

Lindsay Bonito, MPA Program Manager

RECOMMENDED ACTION: Authorization to disburse up to $500,000 to San Jose State University to continue the California Collaborative Fisheries Research Program (CCFRP) as part of the long-term monitoring of the Marine Protected Area (MPA) network, pending permitting.

LOCATION: Central Coast

STRATEGIC PLAN OBJECTIVE(S): Goal 3: Enhance Coastal and Marine Biodiversity; Target 3.3.1 and associated actions.

EXHIBITS:

Exhibit A: 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 Budget Act of 2021 which included a $2.5 million General Fund appropriation for MPA monitoring; and
> 3) The proposed projects are not 'legal projects' that trigger the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15378."

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 $500,000 to the San Jose State University to implement the California Collaborative Fisheries Research Program.
>
> This authorization is subject to the condition that prior to disbursement of funds, San Jose State University 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:

California's Marine Protected Area Network is embarking on its first decadal management review, a feat that could not be accomplished without its novel partnership-based approach and collaborations with NGOs, community science organizations, and academic institutions to collect and compile the best available science. Over the past ten years, California has invested in baseline and long-term monitoring efforts to catalog California's diverse array of ecosystems, habitats, species, and evaluate progress towards meeting the goals of the Marine Life Protection Act[1], the MPA Network's founding legislation. In 2019, the OPC funded several long-term monitoring projects[2] currently underway, including the California Collaborative Fisheries Research Program (CCFRP), a partnership of people and communities interested in sustainable fisheries. Since 2007, CCFRP has been bringing together the expertise and ideas of fishermen and scientists to gather information for MPA and fisheries management. The program has been vital to understand the effects of MPAs on local marine resources; data collected through CCFRP allows researchers to determine whether any changes in fished and unfished populations are due to differences in area, season, year, or level of protection. Extending support for CCFRP through the 2022 field season will provide much-needed scientific information to continue assessments of the efficacy of California's MPAs and support of sustainable fisheries management.

PROJECT SUMMARY:

Background:

CCRFP is a diverse partnership of volunteer fishermen, boat captains, scientists, nongovernmental organizations, and charter companies interested in promoting sustainable fisheries. Since the establishment of the MPA network, CCFRP has worked to develop a long-term coordinated, collaborative, and standardized statewide monitoring program that involves recreational anglers in hook-and-line surveys inside and outside MPAs. Incorporating an interdisciplinary approach, CCFRP has worked closely with state

[1] https://wildlife.ca.gov/Conservation/Marine/MPAs/MLPA
[2] http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20190523/Item3a_MPA_Longterm_Monitoring_Projects_FINAL.pdf

and federal partners since the program's creation in 2006. In the intervening 10+ years, CCFRP has produced reliable estimates of relative abundance, size frequency distributions, and fish movements across 16 MPAs and associated reference sites statewide; it has also generated highly useful long-term trends in catch and biomass for central coast fishes, published peer-reviewed papers in scientific literature, and deployed two socioeconomic surveys to assess angler perception of MPAs and compliance with MPA regulations. CCFRP's approach includes not only scientifically rigorous data collection and analysis, but also meaningful outreach and engagement with fishermen, scientists, resource managers, and the general public. The state should continue its investment in this novel and effective program.

Project Summary:
This project will accomplish the following objectives:

- Continue CCFRP trips and data collection in Tier I MPA sites on the Central Coast through 2022, with a focus on monitoring fish abundance, size, biomass, diversity, species composition, and spillover.
- Conduct spatial and temporal analyses to evaluate MPA performance, including MPA-reference site comparisons of the following:
    - Abundance/biomass of indicator species
    - Species diversity
    - Trophic structure
    - Occurrence of special status species
- Assess spillover, connectivity, and impact of environmental stressors.
- Assess level of compliance and attitude towards/perception of MPAs in recreational fishing community.
- Continue community outreach & education with a focus on the recreational fishing community.

About the Grantee
CCFRP, based at Moss Landing Marine Laboratories (San Jose State University), is a collaborative effort among researchers from six California universities, the captains and crew of 27 commercial passenger fishing vessels, and more than 1,200 volunteer anglers spanning the entire California coast. CCFRP Principal Investigators (PIs) have extensive experience with California's MPA network and monitoring priorities, familiarity with existing data streams, rigorous theoretical grounding in quantitative approaches for MPA evaluation, and proven success in building broad, collaborative partnerships.

Project Timeline
This recommended action will extend the current project deadline to May 2023.

PROJECT FINANCING:

Staff recommends that the Ocean Protection Council (OPC) authorize encumbrance of up to $500,000 to San Jose State University to continue the California Collaborative Fisheries Research Program through 2022, pending permitting.

San Jose State University – CCFRP	$500,000
TOTAL	**$500,000**

The anticipated source of funds will be from the Marine Protected Areas General Fund 2021/2022 appropriation. In 2015, the California state legislature allocated a $2.5 million annual General Fund appropriation to the Secretary for Natural Resources to support the Statewide MPA Monitoring Program. The monitoring and analysis projects are consistent with the goals of the state's MPA monitoring program by continuing monitoring efforts and subsequent data analyses.

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: *This project will help identify emerging threats from climate change and ensure existing protections are being effectively implemented.*
- Improve the management of fisheries: *Data collection from this effort contributes to stock assessments and management of groundfish species across the state.*
- Foster sustainable fisheries: *Expected ecological benefits from MPA networks include benefits to fished populations.*
- Allow for increased public access to, and enjoyment of, ocean and coastal resources, consistent with sustainable, long-term protection and conservation of those resources: *Increased understanding of the MPA network will help ensure continued access by the public. This project relies heavily on volunteer anglers for data collection, strengthening collaboration between academic researchers and the public and fostering enjoyment of ocean resources.*
- Improve management, conservation, and protection of coastal waters and ocean ecosystems: *Information from this project will directly inform the adaptive management of the MPA network*
- Provide monitoring and scientific data to improve state efforts to protect and conserve ocean resources: *This is a long-term monitoring project that will generate scientific data to directly inform adaptive management of the MPA network.*

- Protect, conserve, and restore coastal waters and ocean ecosystems: *MPA networks globally, and early results from California's MPA network, have shown protection, conservation and restorations benefits for some species and habitats.*
- 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: *Information from this project will directly inform the adaptive management of the MPA network as well as informing the understanding of climate change impacts.*

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

The proposed project is categorically exempt from review under the California Environmental Quality Act ("CEQA") pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.