



Item 4a

CALIFORNIA OCEAN PROTECTION COUNCIL

Staff Recommendation  
July 25, 2018

**Marine Protected Area (MPA) Monitoring Program:  
Phase 2 Implementation to Inform 2022 MPA Network Management Review**

Cyndi Dawson, MPA Policy Advisor/MPA Senior Program Manager

**RECOMMENDED ACTION:** Authorization to disburse up to \$9,980,187 to Regents of the University of California San Diego, California Sea Grant to 1) conduct a scientific peer review of the MPA Monitoring Program Action Plan (\$31,951) and 2) administer a competitive process to solicit and fund MPA monitoring and data analysis projects (\$9,948,236) in preparation for the mandated California MPA Network Management Review to the Fish and Game Commission in 2022.

**LOCATION:** Statewide

**STRATEGIC PLAN OBJECTIVES:** 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.

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**EXHIBITS**

Exhibit A: Detail of FY 15/16, FY 16/17 and FY 17/18 General Fund Spending

Exhibit B: Summary of General Fund MPA Monitoring spending FY 15/16, 16/17 and 17/18

Exhibit C: Letters of Support

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**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), the Ocean Protection Council hereby finds that:

- 1) The proposed project is consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act.
- 2) The proposed project is consistent with the Ocean Protection Council's Proposition 84 grant funding guidelines (Interim Standards and Protocols, February 2014), the Budget Acts of 2015, 2016, and 2017, which included a

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\$2.5 million General Fund appropriation for MPA Monitoring, and the adopted State Water Resource Control Board's Once-Through Cooling Policy.

- 3) The proposed projects are not 'legal projects' that trigger the California Environmental Quality Act pursuant to Public Resources Code section 21068 and Title 14 of the California Code of Regulations, section 15378."

Staff further recommends that the 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 \$9,980,197 to Regents of the University of California San Diego, California Sea Grant (California Sea Grant) to 1) conduct a scientific peer review of the MPA Monitoring Program Action Plan (\$31,951) and 2) administer a competitive process to solicit and fund MPA monitoring and data analysis projects (\$9,948,236) in preparation for the mandated California MPA Network Management Review to the Fish and Game Commission in 2022, subject to the condition that projects selected through this review process will be presented to the council for final review and approval of the grant awards."

Prior to disbursement of any funds, California Sea Grant, shall submit - for 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. Once-Through-Cooling Interim Mitigation funds will not be disbursed until final grant guidelines are adopted by OPC at its October 25, 2018 meeting.

**PROJECT SUMMARY:**

This project has two primary components and would support 1) a scientific peer review of the MPA Monitoring Program Action Plan (\$31,951) and 2) administer a competitive process to solicit and fund MPA monitoring and data analysis projects (\$9,948,236). The Action Plan, which will be brought to the Council for consideration and approval at its October 25, 2018 meeting, provides the roadmap for long-term monitoring by identifying selected priority metrics, sites and indicator species. Scientific peer review of the Action Plan will ensure that the best available science is being used to inform the MPA Monitoring Program priorities. Up to \$9,500,000 of the \$9,948,236 will be available to directly fund monitoring projects consistent with the Action Plan, through a competitive grant process. These projects would be selected through a competitive Request for Qualifications (RFQ) administered by California Sea Grant in coordination with OPC staff. All projects would be brought to the OPC for consideration and approval in February 2019 prior to funds being disbursed.

The two components of this project taken together would fund the implementation of Phase 2 of the MPA Monitoring Program in preparation for the mandated MPA Network Management Review that will be presented to the Fish Game Commission (Commission) in 2022. A process for MPA Management Review is described in the MLPA Master Plan<sup>1</sup> and is an important component of the adaptive management process. The Commission will initiate a formal management review of statewide MPA network performance at least once every decade. These reviews will emphasize ecological, socioeconomic, and governance aspects of the network and may include, but not be limited to, a scientific evaluation, public scoping meetings, and panel discussions to determine the status, function, and possible changes to the network. This Management Review will assess the effectiveness of the MPA Network at meeting the goals of the Marine Life Protection Act (MLPA) and inform adaptive management strategies.

This project will continue OPC's support for the long-term success of California's MPA Network and will ensure that the State is prepared for the 2022 Management Review. This project will also allow OPC staff, California Department of Fish and Wildlife (CDFW), and others to leverage funds with outside sources to increase the overall amount of funding

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<sup>1</sup> <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=133535&inline>, see page 50

available for long-term MPA monitoring in the state or expand the applicability of OPC-funded data. The MPA Monitoring Program has created a cross-disciplinary network of partners inside and outside government that are invested in monitoring the effectiveness of the states MPA Network.

Staff is confident that OPC funds will result in useful data and analyses, and any additional funds contributed from other sources will improve the resolution or expand the applicability of the OPC-funded data. Similar investments to date have produced critical data that has informed adaptive management of the MPA Network and other state priorities, such as understanding changing ocean conditions.

## **PROJECT DESCRIPTION**

### **Project Background:**

In 2012, through a multi-year stakeholder driven and science-based process, California completed the largest ecologically connected network of MPAs in North America and one of the largest in the world (see Exhibit A). The design of the network was driven by the goals identified in the MLPA and focused on protecting, conserving and where possible restoring marine habitats, species and ecosystems. The MLPA also requires: “Provisions for monitoring, research, and evaluation at selected sites to facilitate adaptive management of MPAs and ensure that the system meets the goals stated in this chapter (Fish and Game Code Title 14 §2853 6(3)c).”

Lead by the MPA Statewide Leadership Team (Leadership Team), made up of agencies, departments, commissions, boards, organizational representatives and regional tribal representatives that have regulatory jurisdiction, mandates or interest in the State’s MPA Network, California has developed a comprehensive MPA Management Program. The Leadership Team developed a work plan with discrete prioritized tasks related to the four focal areas of the MPA Management Program which include: outreach and education; enforcement and compliance; policy and permitting; and research and monitoring. The Leadership Team Work Plan<sup>2</sup> was endorsed by the Ocean Protection Council on September 22, 2015<sup>3</sup> and directs all aspects of the MPA Monitoring Program.

The first phase of the MPA Monitoring Program began at or near the time of regional implementation from 2007 - 2017. In 2008, OPC approved \$4 million for each region state to be disbursed to each region in the order the MPAs were implemented (Central<sup>4</sup>; North Central, South and North<sup>5</sup>). These funds were administered by California Sea Grant through a competitive grant process. In total, 39 state-approved projects were awarded (Central = 7; North Central = 11; South = 10; North = 11) and comprehensive baseline monitoring was conducted to establish the conditions present at or near the time of MPA implementation, both inside and at areas with similar conditions outside MPAs. This approach allowed for trend monitoring over time to establish any potential ecological effects of removing or reducing fishing in an MPA. Funded baseline projects consisted of two to three years of data collection, one year of analysis, and the production of a technical report that underwent scientific peer review prior to being accepted by the state. All raw data, analyses and technical reports are publicly available and can be accessed on the California Natural Resources Agency’s Open Data Portal at [data.cnra.ca.gov](http://data.cnra.ca.gov).

All baseline projects made recommendations for long-term monitoring, including design, metric, method and program components. One of the key recommendations across regions and projects was to establish a funding mechanism that

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<sup>2</sup> [http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20150922/Item5\\_Attach1\\_Workplan\\_ExecutiveSummary\\_FINALv2.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20150922/Item5_Attach1_Workplan_ExecutiveSummary_FINALv2.pdf)

<sup>3</sup> [http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20150922/Item5\\_MPAStatewideLeadershipTeam\\_MemoFINAL.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20150922/Item5_MPAStatewideLeadershipTeam_MemoFINAL.pdf)

<sup>4</sup> [http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20080515/06\\_Central%20Coast%20Baseline%20Characterization/0805OPC06\\_MPA.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20080515/06_Central%20Coast%20Baseline%20Characterization/0805OPC06_MPA.pdf)

<sup>5</sup> <http://www.opc.ca.gov/2009/09/opc-meeting-november-20-21-2008/>

could support multi-year monitoring efforts. Most field projects incur significant costs to train, outfit and retain field staff. Annual projects require these costs to be supported each year whereas multi-year projects can reduce these costs significantly allowing more state funds to go to data collection and analyses versus training and equipment.

### **Project Detail and Scope of Work**

The 2016 MLPA Master Plan<sup>6</sup> specifically references the Leadership Team Work Plan and identifies developing and implementing a statewide long-term monitoring plan (MPA Monitoring Action Plan<sup>7</sup>) as a high priority need to ensure MPA Network success. This project brings in the scientific expertise needed to conduct a peer review of the MPA Monitoring Action Plan, which lays out a roadmap of priority sites and metrics to be monitored to ensure the state is prepared for the 2022 Management Review. Once the MPA Monitoring Action Plan is approved by OPC, a request for qualifications (RFQ) will be released this fall to fund projects that will implement the Action Plan. California Sea Grant will bring their scientific expertise to partner with OPC and CDFW to conduct a competitive scientific grant review process. The scientific review panel, which will include OPC staff and other state agency representatives, will make recommendations to fund projects that best meet the Action Plan requirements. OPC staff will present these projects to the Council for consideration and final approval in February 2019.

This project is the culmination of years of work with agency and external partners and is broadly supported by the ocean community. It fulfills OPC's public commitment to the success of California's MPA Network and implementation of the MLPA Master Plan and the Leadership Team Work Plan and provides the Council with direct oversight of the guidelines in the Action Plan and funding of projects that meet the criteria outlined in the Action Plan.

### **Project Grantee**

California Sea Grant will coordinate the request for qualifications, the review process, and post-award administration of contracts for data collection and research projects funded through this proposed grant. California Sea Grant has an established, highly respected process for evaluating, prioritizing, and administering research grants related to coastal and ocean resources and has a proven track record of supporting state agencies' research efforts. California Sea Grant is experienced at managing large contracts and grants, has excellent knowledge of and familiarity with the state's scientific community, and has successfully managed other solicitation and award efforts on behalf of OPC.

### **Accountability and Transparency**

This project will support science-based, long-term MPA monitoring, prioritize public engagement, and retain full OPC oversight of funded projects by providing:

- A scientific peer review for the Action Plan to ensure the document lays out a discrete roadmap of what and where the state needs to monitor to successfully prepare for the mandated 2022 MPA Network Management Review (July 2018).
- At least a 30-day public review period of the Action Plan and guidelines developed from the Action Plan for the MPA Monitoring Program RFQ (August – early September).
- Additional public comment period prior to the October 25<sup>th</sup> OPC meeting on the Action Plan for the MPA Monitoring Program RFQ guidelines (By October 1, 2018).
- OPC consideration and adoption of Action Plan. If adopted, an RFQ will be released based on the guidelines in the Action Plan.

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<sup>6</sup> <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=112486&inline>, see page 45

<sup>7</sup> <http://www.opc.ca.gov/programs-summary/marine-protected-areas/research-and-monitoring/long-term-monitoring/>

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- Scientific peer review of proposals received from the RFQ based on OPC adopted guidelines.
- OPC approval of recommended projects. If projects are not approved for the full amount of remaining funds, OPC may choose to re-release another RFQ.
- Ongoing reporting, including project summaries and progress reports that will be posted online as projects move forward.

**Site Description:**

The project will take place statewide across all four coastal regions:

North Coast – Oregon border to Alder Creek, near Point Arena

North Central Coast – Alder Creek, near Point Arena to Pigeon Point

Central Coast – Pigeon Point to Point Conception

South Coast – Point Conception to the US/Mexico border

**Project Timeline:**

- California Sea Grant will establish a Peer Review Panel to review the Action Plan in late July/early August 2018.
- In late August 2018, California Sea Grant will produce a finalized report from the Peer Review Panel that will be delivered to OPC and CDFW.
- In October 2018, assuming the OPC adopts the MPA Action Plan and the Once-Through Cooling grant guidelines, California Sea Grant will issue a Request for Qualifications (RFQ).
- In January and February 2019, California Sea Grant will convene scientific review panels to assess and score project proposals.
- Recommended projects will be brought to the OPC in February 2019 for consideration.

**PROJECT FINANCING:**

Staff recommends that OPC authorize encumbrance of up to \$9,980,197 to California Sea Grant to administer Phase 2 of the MPA Monitoring Program, in coordination with OPC, in preparation for the mandated 2022 California MPA Network Management Review.

|                          |                     |
|--------------------------|---------------------|
| Ocean Protection Council | \$9,980,187         |
| <b>TOTAL</b>             | <b>\$9,980,1987</b> |

| <b>Funding Source</b>         | <b>Fiscal Year</b> | <b>Funding Amount</b> |
|-------------------------------|--------------------|-----------------------|
| Proposition 84                | 09/10              | \$2,613,875           |
| General Fund – MPA Monitoring | 17/18              | \$304,685             |
| General Fund – MPA Monitoring | 18/19              | \$2,500,000           |
| Once-Through Cooling Funds    | 18/19              | \$4,561,627           |
| <b>TOTAL</b>                  |                    | <b>\$9,980,1987</b>   |

As directed by the Leadership Team Work Plan, OPC staff has been leading discussions with CDFW and partners statewide to implement the adopted directive of designing and implementing a partnerships-based monitoring program that assesses MPA network performance and informs multiple mandates. In 2015, the Legislature allocated a \$2.5 million annual General Fund appropriation to the Secretary for Natural Resources to support the MPA Monitoring Program.<sup>8</sup> Through a collaborative process between the Leadership Team and the Secretary, the initial spending of this appropriation to support MPA monitoring was approved by the Secretary in early 2016. The spending focused on: maintaining required scientific tools to conduct monitoring and increasing scientific capacity within the state; continuing ongoing monitoring statewide in subtidal and intertidal habitats; and ensuring the completion of the first five-year management reviews for all regions. Since the initial spending in FY15/16, subsequent spending has focused on creating a long-term monitoring program for the state to ensure the state is well prepared for the 2022 mandated MPA Network Management Review (see Exhibit B).

Funding for this project would aggregate funds from four sources designated to support MPA Monitoring: 1) \$304,685 from the FY 17/18 General Fund appropriation; 2) \$2.5 million from the FY 18/19 General Fund appropriation; 3) \$2,613,875 from Proposition 84 funds; and 4) \$4,561,627 from Once-Through Cooling (OTC) Interim Mitigation Funds. Proposition 84 and OTC Interim Mitigation Funds proposed for this project are described in further detail below.

**Proposition 84 Funds.** On June 14, 2014, OPC authorized the disbursement of \$3 million for long-term monitoring of the Central Coast MPAs.<sup>9</sup> \$2,613,875 of that original \$3 million was set aside to support comprehensive statewide long-term monitoring that is proposed in this project, rather than a year-by-year regionally focused monitoring effort that increases operational costs. Although the Council has already authorized the use of these Proposition 84 funds for this purpose, OPC staff is requesting approval to bundle the remaining \$2,613,875 into a larger statewide monitoring approach facilitated by this project.

**OTC Interim Mitigation Funds.** At the November 1, 2017 OPC meeting, the Council received an update on the ongoing implementation of OPC's OTC Interim Mitigation Program (Mitigation Program).<sup>10</sup> During the development of this Mitigation Program, OPC created a white paper<sup>11</sup> outlining the nexus between the State's MPA Network and OTC impacts. Research to establish and quantify the expected ecological benefits of the MPA Network is critical to understanding what additional mitigation projects may be required to offset for OTC impacts. Additionally, the recent OPC Science Advisory Team Working Group's OTC report<sup>12</sup> identifies this type of research as being critical to achieve the goals of the OTC policy. MPAs can offset some negative ecological impacts caused by OTC and understanding the quantitative proportion of that offset requires the same type of monitoring required to evaluate the performance of the MPA Network. Because of this alignment between long-term monitoring needs and research necessary to meet the OTC Policy (as prioritized in the Mitigation Program), \$4,561,627 of 2018/2019 OTC Mitigation Funds is requested to support this project. As described above, no OTC funds will be disbursed through a competitive grant process until they are approved by the Council, which will only occur after final grant guidelines have gone through public review and are approved by the Council.

#### **CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:**

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<sup>8</sup> [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201520160SB97](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB97)

<sup>9</sup> [http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20140610/Item5-June2014-CCMPA-monitoring.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20140610/Item5-June2014-CCMPA-monitoring.pdf)

<sup>10</sup> [http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20171101/Item6\\_OTC\\_November\\_1\\_FINAL.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20171101/Item6_OTC_November_1_FINAL.pdf)

<sup>11</sup> [http://www.opc.ca.gov/webmaster/media\\_library/2016/10/FINALScience\\_PolicyFramework\\_LinkingMPAsToOTCmitigation\\_8.30.16.pdf](http://www.opc.ca.gov/webmaster/media_library/2016/10/FINALScience_PolicyFramework_LinkingMPAsToOTCmitigation_8.30.16.pdf)

<sup>12</sup> <http://www.opc.ca.gov/webmaster/OST-Ocean-Restoration-Methods-Final-HighRes.pdf>

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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 implemented.
- Foster sustainable fisheries: Expected ecological benefits from MPA Networks include benefits to fished populations.
- 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: Increased understanding of the MPA Network will help insure continued access by the public.
- 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: Information from this project will directly inform the 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.

#### **CONSISTENCY WITH THE OPC'S STRATEGIC PLAN:**

These projects implement Focal Area C: Sustainable Fisheries and Marine Ecosystems

#### **CONSISTENCY WITH PROPOSITION 84 (The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006; Public Resources Code §75060(g))**

The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) provides funding for the protection of beaches, bays, and coastal waters. This project will provide coastal managers and planners with scientific information necessary to properly and effectively protect the coast and adaptively manage the state's marine protected areas, consistent with the objectives of Proposition 84.

#### **CONSISTENCY WITH PROPOSITION 84 OPC Interim Standards and Protocols February 2014**

##### Required Criteria

1. Directly relate to the ocean, coast, associated estuaries, or coastal-draining watersheds: This project directly relates to the coast because it will provide a synthesis of existing data on the performance of the State's MPA Network at meeting the goals of the Marine Live Protection Act.
2. Support of the public: See Exhibit C
3. Greater-than-local interest: This project is statewide.

##### Additional Criteria

4. Improvements to management approaches or techniques: The proposed work will improve management approaches or techniques by providing the current, best available science to inform adaptive management of the State's MPA Network.

5. Resolution of more than one issue: The MPA Network spans the entire coast and data collected as part of this project will directly inform not only the MPA Management Program but also contribute to sustainable fisheries and climate change adaptation management.
6. Leverage: In-kind support from grantees and state agencies will be part of this project.
7. Timeliness or Urgency: The required 2022 Management Review requires both additional data and analyses that will take multiple years to provide insight into MPA Network performance.
8. Coordination: This project continues to support the diverse statewide network of scientists, tribes, fishermen, citizen scientists and federal and state managers that are actively engaged in monitoring the State's MPA Network to establish an understanding of performance related to the goals of the MLPA.

**COMPLIANCE WITH 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.