Marine Protected Area Decadal Management Review

State Lands Commission

Introduction

The State Lands Commission (Commission) has worked with its state partners to protect California's incredibly rich marine biodiversity and habitats through the Marine Protected Areas Statewide Leadership Team (MPA SLT) for many years and is pleased to submit this report. The Marine Protected Area Network is vital to the state's environmental quality, marine resource conservation efforts, cultural heritage, and vibrant blue economy. Managing the critical marine resources within the Network is complex and challenging, necessitating a robust collaboration between the MPA SLT, the public, and the countless ocean users engaged in this marine space. Ten years on from the redesign of the MPA Network, the MPA Decadal Management Review will assess what changes have occurred over time and the lessons that can be learned from the observations. The MPA SLT will apply these lessons to our resource management efforts so that we can meet current and future challenges, charting a successful future for the MPA Network to thrive for many generations to come.

The Commission has participated on the MPA SLT since it was first convened in April 2014. The Commission's has jurisdiction over the state's tide and submerged lands, from the shore to the state/federal water boundary three nautical miles offshore, managing these lands for activities related to fisheries, navigation, commerce, recreation, and environmental stewardship. The public has the right to access these lands where safe and feasible, and the Commission ensures it may do so. The Commission values its membership on the MPA SLT because it has resulted in a much greater level of coordination and collaboration with the other marine and coastal resource management agencies, making the protection of these important marine spaces more robust and effective. Good management leads to higher environmental quality, assured sustainability, and greater levels of resiliency to climate change impacts. The Commission looks forward to continuing the work and adapting to the challenges and opportunities presented by the ever-changing conditions of the marine environment within the MPA Network. The Commission is a signatory to the MPA SLT Memorandum of Understanding which memorializes its commitment to ensuring the success of the MPA Network. As part of the MPA Decadal Management Review, the Commission has information to share on the following achievements, challenges, and recommendations:

Research and Monitoring

Achievements: Facilitated Scientific Research and Monitoring Projects through Grant Awards and Provided Technical Assistance

Scientific research and monitoring are two of the most important activities to take place in the MPA Network. The conservation goal of the MPA Network is to protect and strengthen the ecosystems within the Network because of their ecological significance to the entire California coast. To do this, it is imperative to understand the baseline conditions of the MPAs and explore in more detail the impacts of climate change and

other anthropogenic stressors. The findings that are produced from research are often the basis for resource management planning and decisions made by the agencies that participate in the MPA SLT. For the Commission, monitoring results and research conclusions provide us with a greater understanding of historical trends and future condition projections, helping inform decisions about what uses may be compatible with MPAs, and where those uses could potentially be located. Studies within MPAs also contribute information needed to review proposed projects under the California Environmental Quality Act (CEQA) and develop appropriate lease terms and conditions to ensure activities located within or near MPAs minimally impact the Network and its resources.

The Commission staff participates in efforts to award grants to academic research proposals seeking to learn more about the MPAs and their resources. The Commission is represented on the Resources Agency Sea Grant Advisory Council, convened by the Ocean Protection Council on behalf of the Secretary for Natural Resources. This group works closely with California's two Sea Grant programs, California Sea Grant and University of Southern California Sea Grant, to advance research that informs state management and policy priorities related to protection of coastal and ocean resources in California, including those of the MPA Network. The Council reviews proposals annually related to California Sea Grant programmatic focus areas such as 'Healthy Coastal Ecosystems' and 'Sustainable Fisheries and Aquaculture' in an iterative process that results in grant awards to researchers at state universities. Another grant review committee that Commission staff participates on is the California State University Council on Ocean Affairs, Science, and Technology's State Science Information Needs Program. This program was awarded a one-time $3 million appropriation in 2019 to bolster marine research that would assist coastal resource managers with the highest priority information needs related to sea level rise, ocean acidification and hypoxia, water pollution (including marine debris and microplastics), and sustainable fisheries (including marine protected area management and sustainable aquaculture). These partnerships between the state universities, the Sea Grant program, and the Natural Resources Agencies yield valuable findings that inform adaptive management and help set priorities for future conservation goals.

The Commission provided additional support for research and monitoring activities within the MPA Network by assisting with an exciting pilot project using miniature remote operated vehicles (ROVs). The ROVs were gifted to the MPA Collaborative Network to explore the MPAs and be used for MPA outreach, compliance, and citizen science projects. Before the technology was deployed throughout the MPA Network, a group of volunteers tested the ROVs, practicing how to maneuver them effectively and safely in a controlled setting. Commission staff joined a small working group of advisors that developed general guidelines and best practices for piloting the ROVs through the sensitive habitats and wildlife in MPAs. Commission staff has used similar technology in its Marine Invasive Species Program, piloting ROVs to inspect ship hulls for invasive species.

Recommendation: Focus Upcoming Requests for Proposals and Grant Awards on Emerging Uses – Rigs-to-Reef, Offshore Renewable Energy, and Aquaculture

Looking ahead to the next ten years of MPA resource management, there is a critical need to discover more about the potential impacts and benefits of emerging ocean uses on MPAs, and vice versa. The emerging uses of most interest are rigs-to-reefs, offshore renewable energy, and an expanded and diversified aquaculture industry. The Commission will review lease applications for these and other uses, or in the instance of aquaculture, consultation or advice as needed to its sister agency, the Fish and Game Commission, for leasing. The Commission and other agencies on the MPA SLT also have environmental review responsibilities related to these uses and others. We need more information to guide decision-making. Some of the scientific findings needed could be applicable to more than one use, making the pursuit of these inquiries a highly efficient and effective expenditure of resources. The following are recommendations for research pursuits related to several emerging uses.

Rigs-to-Reef:

The Commission is decommissioning the state's offshore oil and gas platforms. These are large structures that have been in the marine environment for decades, and they act as substrate on which an abundance of marine life has accumulated. Decommissioning options could include full structural removal, or partial removal. Proposals for the latter option are often referred to as 'rigs-to-reef', describing how these structures have, by default, become artificial reefs. The question of whether and to what extent these areas provide benefits to MPAs (e.g., stopovers between MPAs, recruitment sources) is unanswered. As the Commission considers various options for decommissioning, understanding this situation better would be helpful.

Research questions and monitoring projects:

- Characterization of the existing aquatic habitat due to platform structures
- Identification of potential for hazardous materials release and associated impacts
- Potential for species entanglement on existing structures
- Impacts to commercial fishing grounds due to MPA designation

Offshore Renewable Energy

The climate change crisis, perpetuated by human reliance on fossil fuel energy, is driving the need to look for alternative energy sources. Renewable energy facilities such as offshore wind turbines may help the State reduce greenhouse gas emissions and achieve climate stabilization. Commission staff is reviewing two applications for offshore wind energy in state waters. The proposed projects would be located off the Vandenberg Space Force Base, near the Vandenberg State Marine Reserve. Commission staff conducted a Preliminary Environmental Assessment, which provides a preliminary description of both projects with specific details of the wind turbine designs, sequencing of construction phases, operations and maintenance, and decommissioning. The Assessment also includes a preliminary description of alternatives

to the proposed Projects that are anticipated to be considered in an Environmental Impact Report (EIR) for feasibility and further evaluation. As part of conducting the Assessment, staff engaged in early outreach and communication with stakeholders. The following are a selection of the research questions related to MPAs that emerged from the stakeholder engagement and information gathering processes that informed the Preliminary Environmental Assessment.

Research questions and monitoring projects:

- Identification of range of impacts to marine wildlife, particularly threatened and endangered species, from offshore wind turbines
- Impacts to commercial fishing grounds, and analysis of the 'squeezing' effect from expanded or new fishing ground closures on nearby MPAs
- Biological and ecological impacts from offshore wind energy development on the boundaries/edges of MPAs, and the extent of impacts in relation to distance from the boundary/edge of a protected zone.

Aquaculture

The state is positioned to expand and diversify its existing aquaculture industry, and create a model for sustainable, environmentally responsible aquaculture that is compatible with MPAs and the protection and conservation of wild marine species. The state recently issued Guiding Principles For Sustainable Marine Aquaculture In California and is now developing a statewide aquaculture action plan to coordinate and align the efforts of resource managers, industry representatives, and stakeholders in support of sustainable aquaculture in California. There is particular interest in exploring the multiple benefits of aquaculture projects that include habitat restoration and contribute to species and ecosystem conservation.

Research questions and monitoring projects:

- Can sustainable aquaculture projects be co-located with MPAs – what factors determine compatibility of aquaculture with marine protection and conservation?
- What types of aquaculture are most compatible with MPAs?
- What are the potential impacts of different types of aquaculture on MPAs? Are there any benefits?

Outreach and Education

Achievement: Participated In The Review and Award of Small Grants to MPA Collaborative Network Members

Commission staff participated in the MPA SLT's efforts to strengthen and expand the public's connection with the MPA Network. Commission staff joined an internal working group of the MPA SLT to review and award small grants to the MPA Collaborative Network partners. The proposals ranged widely from engaging communities through educational workshops around a particular MPA-connected issue, to creating bilingual coloring books showcasing the wildlife of the local MPA, to making short videos of the marine world below the surface. Commission staff were proud to support as many

projects as possible through this program, made possible by funds from the Once-Through Cooling Interim Mitigation Fund, the Packard Foundation, and the Marisla Foundation. The Commission was especially proud to support efforts that centered Tribal communities and outreach to underserved youth.

Policy and Permitting

Achievement: Integrated Consideration of MPAs into Lease Application and Environmental Review Processes

Over the last ten years, the Commission has integrated considerations for MPAs into their lease application process, striving to balance uses consistent with the Public Trust with the needs and values of the MPA Network. Commission staff compares all applications for use of state-owned tidelands with the statewide MPA map, and reviews proposed activities located in or adjacent to an MPA for regulatory compliance. The Commission ensures lease terms and conditions are aligned to minimize or avoid conflict with MPAs. Similarly, staff considers the location and protection designations of MPAs when performing CEQA analyses of proposed uses of state tidelands. Staff has been encouraged to participate in outreach and education opportunities related to MPAs and the MPA Network to stay updated on recent scientific findings and trends, as well as policy developments. Examples include attending workshops and webinars on topics such as the effects of ocean acidification and hypoxia on MPAs, temperature anomalies and the spread of harmful algal blooms throughout MPAs, and the recent precipitous kelp forest declines. These educational opportunities help inform staff as they review and analyze applications by deepening their understanding of environmental conditions, trends, and events that impact MPAs, as well as the uses the Commission authorizes. In addition, Commission staff has added the MPA map layer into its own mapping resources, such as its Land Management Division map (which includes the point data for all Commission leases) and its Sea Level Rise Viewer, so that staff can quickly determine the proximity of uses to one another and to MPAs.

There are approximately 80 active leases that overlap with the MPA Network. These leases existed prior to the implementation of the MPA Network and are for uses that range from shoreline protection devices like rock revetments to underwater cables to recreational piers. Some leases are actually 'conservation' leases – issued to sister agencies like CA State Parks, CA Department of Fish and Wildlife, US Fish and Wildlife Service, and the National Parks Service for use purposes such as 'wildlife refuge', 'park', and 'ecological reserve'. Often these leases are directly linked to the MPA itself and its resource management. The boundaries of these lease areas may be aligned with the present-day boundaries of the MPA, or they may constitute a portion within the MPA (these leases pre-date the redesign of the MPA Network). The provisions of these leases tend to not be highly detailed, and the use is predicated on conservation and ecological management, rather than an extractive or development purpose.

There is an effort currently underway to revise the Fish and Game Code to allow for maintenance and repair of existing lease facilities within MPAs. This is being done to correct for an oversight that occurred during the MPA Network redesign that did not recognize the potential for conflict between a lessee's obligations under the lease and

the prohibitions on "take" in an MPA. A lessee has a vested right, protected by their contract with the State of California, to conduct the activities authorized by the lease, including maintenance and repair under specified conditions. Commission staff has worked with agency members of the MPA SLT to identify the structures and leases that were authorized by the Commission prior to their MPA designations ("existing structures") and develop a process for review when repair or maintenance on those structures are necessary. The rulemaking process is expected to be completed by the end of 2022.

Recommendation: Develop a protocol for enhanced coordination between agencies to address scientific collecting permit requests in MPAs

There are numerous requests each year from scientific researchers to collect data and samples from MPAs but there is not a fully developed coordination process between agencies to address these requests in an efficient manner. This can become a roadblock for researchers and impede the advancement of important research and monitoring activities needed to inform resource management. Commission staff recommends the relevant member agencies of the MPA SLT develop a shared protocol for coordination. The protocol could include the following elements (this is not an exhaustive list):

- A brief summary of the types of scientific collection permits and agency roles and responsibilities associated with the issuance of permits
- A flow chart that outlines the necessary permit steps, associated responsible agencies for authorizations, and timeframes associated with each step (if possible)
- Information regarding time-sensitive requests/expedited permits
- An easily accessible list of activities that are/are not allowed within each MPA, and whether each listed activity requires a scientific collection permit, and from whom
- Points of contact at each agency for questions regarding scientific collection permits and coordination

Summary

The Commission remains a dedicated partner in the management of the state's MPA Network and committed to the ongoing work of the MPA SLT. In the focal areas of 'Research and Monitoring' and 'Outreach and Education', Commission staff has contributed mostly through facilitating these activities through grant award programs. The Commission has also worked to integrate MPA considerations into its practices and programs so that its leases reflect the conservation and protection goals and regulations of the MPA Network. Staff looks forward to working with its management partners on implementing recommendations related to advancing our scientific understanding of MPAs to improve management outcomes, especially for emerging uses.