


Memorandum

Date: March 24, 2016

To: Mike Yaun
Acting Executive Director
California Fish and Game Commission

From: Charlton H. Bonham
Director



Subject: Management Review of the North Central Coast Marine Protected Areas

Overview

On August 5, 2009, the Fish and Game Commission (Commission) adopted 25 new and revised north central coast marine protected areas (MPAs) and six special closures that were implemented into regulations on May 1, 2010. This region is part of a statewide network of 124 MPAs designed to meet the goals of the Marine Life Protection Act (MLPA), including protecting marine populations, habitats and ecosystems, improving sustainable human use of our ocean, and protecting marine natural heritage. The north central coast MPAs encompass approximately 152 square miles or 20 percent of state waters between Alder Creek near Point Arena (Mendocino County) and Pigeon Point (San Mateo County), including state waters surrounding the Farallon Islands. As provisions in the MLPA require monitoring, research, and evaluation to facilitate adaptive management, the purpose of this memorandum is to transmit the Department of Fish and Wildlife's (Department) management review of the north central coast MPAs to the Commission.

The north central coast region is the second of four regions to complete a MPA baseline monitoring program. The North Central Coast MPA Baseline Program (Baseline Program) is a partnership between the Department, Ocean Science Trust (OST), Ocean Protection Council (OPC), and California Sea Grant. The Baseline Program in the north central coast included 11 projects selected to monitor a broad range of species, habitats, human uses, and patterns of ocean currents in the region. Data collected from these projects, and additional monitoring over the first five years of MPA implementation in the region, provides the State with a characterization of the habitats, biological communities, socioeconomic conditions, and initial changes since the new and revised MPAs were implemented. To inform management recommendations from the first five years of MPA implementation in the region, a State of the California North Central Coast (State of the Region) report was developed in November 2015. The report provides a summary of the Baseline Program and includes other related materials from other monitoring activities during the first five years of MPA implementation in the region (<http://oceanspaces.org/nccsotr>).

Scientific Learning from Baseline Monitoring

Based on monitoring over the first five years of MPA implementation in the region, the north central coast MPAs contain a variety of representative marine habitats and ecosystems with distinct biological communities which contribute to achieving the ecological goals of the MLPA. Environmental conditions in the region fluctuate from year to year. However, the last several years have been marked with exceptional and unusual oceanographic conditions, demonstrating the value of monitoring to detect changes to biological communities beyond those directly resulting from MPAs.

In 2011, a harmful algal bloom event caused a severe invertebrate die-off along the Sonoma County coast, and led to a temporary emergency closure of the red abalone fishery by the Commission. Beginning in 2013, a mass die-off of sea stars caused by a wasting syndrome took place across the North American west coast. In 2013-2014 an unusual persistent ridge of atmospheric high pressure in the northeastern Pacific Ocean led to an enormous mass of unusually warm ocean water known as – “The Blob” – setting sea temperature records. The 2015-16 El Niño event is presently maintaining temperature anomalies similar to the 1982-1983 and 1997-1998 El Niño events.

Recreational and commercial fishermen reported the loss of some traditional fishing grounds, traveling farther to fish, and increased fishing pressure in the remaining open fishing areas due to MPAs. However, socioeconomic data demonstrated that fishing continues to be an integral part of the north central coast ocean economy, along with scenic enjoyment, photography, wildlife viewing, and research charters.

Management Recommendations

California’s MPAs are designed, and managed, to the extent possible, as a statewide network. Management from the perspective of the statewide network is informed by lessons and best practices from the statewide, regional and local scales. While regulatory changes based on the Baseline Program data are not recommended at this time, opportunities exist to continue to improve the MPA Management Program through four focal areas: monitoring and research, enforcement and compliance, outreach and education, and policy and permitting. Based on experience gained over the last five years implementing and managing the north central coast MPAs and input from partners, Tribes and Tribal governments, and stakeholders, the Department has the following management recommendations:

Monitoring and Research

- Continue to support a partnership-based monitoring approach to leverage capacity across the state and establish cost-effective and sustainable long-term MPA monitoring and research through the Statewide MPA Monitoring Program.
- Continue to work closely with partners to adapt and draw from regional activities to establish a Statewide MPA Monitoring Program that gathers sufficient information to evaluate the efficacy of the statewide MPA network relative to the MLPA goals.

- Develop improved approaches to communicate monitoring results and information to broad audiences about the efficacy of the MPA network relative to the MLPA goals.
- Explore with partners how MPA science and management can align with other management efforts such as fisheries, water quality, and climate change.

Enforcement and Compliance

- Utilize available technology to make regulatory activities more efficient and effective, including identifying areas of high priority.
- Maintain and enhance cooperative interagency MPA enforcement efforts to improve efficiency.
- Continue to explore new and emerging technology options for increased MPA enforcement efficiency. Identify metrics to be collected in the field to better track MPA compliance.
- When appropriate, change or adopt regulations to simplify or clarify specific language to improve compliance.

Outreach and Education

- Continue to work with partners throughout the state to improve compliance and build public awareness and understanding of California's MPA network through outreach, education, communication, and interpretation activities.
- Continue to communicate directly with the public on a regular basis, and develop outreach materials and resources focused on regulation compliance.
- Coordinate with partners to leverage resources, prioritize accurate, consistent, and cohesive key messages across MPA signage, communication mechanisms, and audiences to support MPA management priorities.
- Work with partners on educational programs that support MPA goals, with special focus on statewide strategies and broadening outreach efforts to unaware communities, including ocean users that indirectly impact marine resources.

Policy and Permitting

- Continue to provide biological data and expertise to inform the Commission's policy, adaptive management, and regulatory decision-making processes.
- Implement an updated MLPA Master Plan for MPAs to shift the focus of programmatic MPA guidance from planning to managing the MPA network.
- Continue planning with the MPA Statewide Leadership Team to increase coordination between permitting agencies and improve governance.
- Continue to work with OPC's Science Advisory Team to develop an ecological impact assessment tool to identify potential cumulative impacts prior to issuing a scientific collection permit within MPAs.

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Adaptive management, as defined by the MLPA (Section 2852(a), Fish and Game Code) is an ongoing process which seeks to improve management by learning from program actions such as monitoring, evaluation, and other management actions that affect the MPA network. For example, regulatory adjustments have been recommended by the Department and adopted by the Commission to improve boundary accuracy and clarify regulatory language to improve network compliance and enforceability. Adaptive management coupled with a commitment to a partnership-based approach will continue to set the foundation for managing California's MPA network.

If you have any questions or need additional information, please contact Dr. Craig Shuman, Regional Manager of the Marine Region, at (805) 568-1246.

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