

Memorandum

Date: April 7, 2017

To: Valerie Termini
Executive Director
Fish and Game Commission

From: Charlton H. Bonham
Director



Subject: **Management Review of Baseline Information for South Coast Marine Protected Areas**

Overview:

On December 15, 2010, the Fish and Game Commission (Commission) adopted regulations for 50 new and revised south coast marine protected areas (MPAs) and two special closures. These areas established by regulations, including 13 MPAs established in 2003 at the northern Channel Islands (retained without change), were implemented January 1, 2012. 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 south coast MPAs encompass approximately 355 square miles or 15 percent of California's jurisdictional waters (0-3 nautical miles from shore) between Point Conception in Santa Barbara County and the US-MEX border, including state waters surrounding offshore islands. The MLPA requires monitoring, research, and evaluation to facilitate adaptive management of the network. The purpose of this memorandum is to transmit the Department of Fish and Wildlife's (Department) management review of the baseline information collected within the south coast following MPA implementation to the Commission.

The Statewide MPA Monitoring Program takes a two-phase approach to monitoring: regional baseline monitoring (Phase I) and statewide long-term monitoring (Phase II). The south coast is the third of four coastal regions to complete Phase I. A total of 10 regional projects were funded; nine monitored a broad range of species, habitats, human uses, and patterns of ocean currents, both inside and outside MPAs; and one was an integrative project meant to tie all nine research projects together. Data collected from these projects (2011-2013), and additional monitoring over the first five years of MPA implementation, provides a benchmark characterization of the region.

To help inform management recommendations following MPA implementation, the Department, Ocean Science Trust (OST), and the Ocean Protection Council (OPC) worked collaboratively to produce the "State of the California South Coast" report as was done in the central and north central coast regions. The report provides a summary of baseline monitoring and related information from other monitoring activities during the first five years of MPA implementation in the region (<http://oceanspaces.org/south-coast-state-region>).

The Department, OST, and OPC collaboratively shared this report and other baseline data with constituents throughout the south coast during community gathering events in March 2017.

Scientific Learning from Baseline Monitoring:

Baseline monitoring results indicate the south 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. Ongoing monitoring within "historic" MPAs, specifically northern Channel Island MPAs, reveals an increase in fish density and biomass inside and outside MPAs, for targeted and non-targeted species; targeted species inside MPAs demonstrate the greatest biomass increases.

Environmental conditions in the region can fluctuate from year to year. However, the last several years have been marked with unusual oceanographic conditions across the eastern Pacific. Beginning in 2013, a mass die-off of sea stars took place from the Gulf of Alaska to Baja California. The 2015-2016 El Niño event rivaled sea surface temperature anomalies set during the 1982-1983 and 1997-1998 El Niño events. Additionally, in May 2015 over 100,000 gallons of crude oil leaked from a pipeline near Refugio State Beach in Santa Barbara county, with approximately 21,000 gallons reaching the ocean. Data collected during baseline monitoring provided a wealth of information about conditions at or near Refugio State Beach before the spill.

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. Despite this, an analysis of landings and revenue reported on landing receipts and Commercial Passenger Fishing Vessel logbooks showed fishing continues to be an integral part of the regional ocean economy. A survey, conducted by Point 97/Ecotrust in 2012 and 2013, shows beach going, scenic enjoyment, biking, and hiking as the most popular non-consumptive coastal activities.

Management Recommendations:

California's MPAs were designed, and now managed, to the extent possible, as a statewide network. Management of the network is informed by lessons learned and best management practices from statewide, regional, and local scales. While regulatory changes based on baseline monitoring data are not recommended at this time, opportunities exist 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 managing the south coast MPAs and input from core partners, Tribes and Tribal governments, and stakeholders, the Department recommends the following:

Monitoring and Research

- Continue supporting a partnership-based monitoring approach to leverage cost-effective/sustainable long-term MPA monitoring practices.
- Implement a Statewide MPA Monitoring Program that gathers information from regional activities to evaluate the statewide network relative to the MLPA goals.

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

Enforcement and Compliance

- Use available technology to make regulatory activities more efficient and effective, including identifying high priority enforcement areas (e.g. Santa Catalina Island MPAs had 51 percent of the recorded south coast violations from 2012-2015).
- Maintain and enhance cooperative interagency MPA enforcement efforts.
- Continue exploring new and emerging technology for increased MPA enforcement efficiency; identify metrics to collect in the field to better track MPA compliance.
- Change or adopt regulations as needed to simplify or clarify specific language to improve compliance.

Outreach and Education

- Continue working with partners to improve public awareness, understanding, and compliance of California's MPA network through outreach, education, communication, and interpretation activities (e.g. 195 regulatory and interpretive signs installed statewide; 66 installed in the south coast.)
- Continue communicating directly with the public, and developing outreach materials and resources (e.g. over 200,000 MPA regulatory guidebooks and brochures distributed statewide; approximately 60,000 distributed in the south coast.)
- Continue working with partners on educational programs that support MPA goals, and reach out to various age groups and cultural backgrounds in communities inland and along the coast (e.g. PORTS [Parks Online Resources for Teachers and Students] program in partnership with State Parks brings MPA messaging into K-12 classrooms for free.)

Policy and Permitting

- Continue to provide expertise to inform the Commission's policies, adaptive management, and regulatory decision-making processes.
- Continue planning with the MPA Statewide Leadership Team to increase coordination between permitting agencies to improve governance.
- Continue working with the OPC Science Advisory Team to develop an ecological impact assessment tool to identify cumulative impacts within MPAs prior to issuing a scientific collecting permit.

Adaptive management, as defined by the MLPA 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 (Fish and Game Code, § 2852[a]).

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For example, to improve MPA compliance and enforceability across the MPA network, the Commission took action to amend regulations to clarify regulatory language, correct existing errors, and update allowable activities within MPAs. The Department will continue to use the best available science to make well-informed adaptive management recommendations into the future.

If you have any questions or need additional information, please contact Dr. Craig Shuman, Regional Manager of the Marine Region, at (805) 568-0216.

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