

Establishing a Benchmark for North Central Coast MPAs

An interdisciplinary effort to support sound management of our coast and ocean

MARINE PROTECTED AREAS IN THE NORTH CENTRAL COAST

The North Central Coast network of marine protected areas (MPAs) extends from Alder Creek (near Point Arena) south to Pigeon Point, and includes the state waters surrounding the Farallon Islands. The network was implemented in 2010, and includes 22 MPAs and 3 State Marine Recreational Management Areas that, in combination, cover about 20% of the state waters in the region and a wide variety of diverse ecosystems and human uses.

NORTH CENTRAL COAST MPA BASELINE PROGRAM

The North Central Coast MPA Baseline Program was established at the time of MPA implementation to create a benchmark against which future MPA performance can be measured, and to provide a foundation for rigorous, science-informed management decisions in the region. A team comprised of California Ocean Science Trust, California Department of Fish and Wildlife, the California Ocean Protection Council, and California Sea Grant led the Baseline Program, which funded 11 projects to monitor a suite of key ecosystems and human uses. Data were collected from shore to the deepest waters, across a range of ecosystems such as sandy beaches, rocky intertidal zones, kelp forests, and the deep waters around the Farallon Islands. Data were also collected on human uses, including commercial and recreational fishing, beach use, and boating. A *Regional Snapshot* of these projects, along with technical reports and data, can be found at OceanSpaces.org.

Exploring Connections Among Ecosystems, Socioeconomics, and Environmental Conditions

As part of the Baseline Program, Ocean Science Trust, California Department of Fish and Wildlife, and the Partnership for Interdisciplinary Studies of Coastal Oceans worked together to engage baseline program scientists and partners to integrate the data collected during the program. This collaboration resulted in the development of additional projects that advance our understanding of conditions in the region and explore new ways to apply existing knowledge. For example, projects developed methods to fill in missing data in critical shallow habitats, examined patterns and impacts of ecosystem connectivity, and assessed the utility of the Baseline Program data to inform climate change indicator tracking. These integration efforts are helping to identify opportunities and tools for long-term monitoring projects, and continue to inform our understanding of the conditions of marine ecosystems in the region.

INFORMING ADAPTIVE MANAGEMENT

From disease outbreaks in seastars to abalone populations reduced by toxic algae blooms, MPA monitoring has gathered important evidence of ecosystem changes, in addition to setting a benchmark of conditions. The Baseline Program team is developing a comprehensive *State of the North Central Coast Region* report, which will provide a solid science foundation to inform the Fish and Game Commission 5-year management review of the MPAs, and complete the first turn of the adaptive management cycle in 2016.

MPA monitoring data can also inform broad management dialogues such as water quality assessments, fisheries management, and climate change tracking.



Visit OceanSpaces.org to learn more about monitoring in the North Central Coast

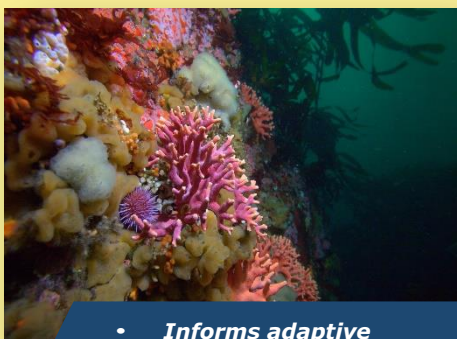
The North Central Coast MPA Monitoring Program:



- **Supports rigorous science for ocean health**



- **Builds valuable partnerships**



- **Informs adaptive management**

PLANNING FOR THE FUTURE

Moving forward, monitoring and evaluating the condition of California's marine ecosystems will benefit from collective efforts of many partners. The North Central Coast MPA Monitoring Plan was developed through a collaborative process with stakeholders and scientists, and approved by the California Fish and Game Commission in 2010. The Monitoring Plan provides the framework and approach that will guide long-term monitoring in the region, in combination with lessons learned from the baseline program. Long-term monitoring will also be informed by the knowledge, expertise, and local priorities of the North Central Coast ocean community, including tribal governments, fishermen, citizen scientists, and recreational ocean users. A plan for long-term monitoring will be scoped throughout 2015 and 2016.

ENGAGING AND SHARING

The results of North Central Coast MPA baseline monitoring are available to everyone. The Baseline Program team is working together to share monitoring activities and findings through a variety of outlets, including:

- Posting online blogs and reports
- Attending community events
- Hosting community gatherings
- Developing academic publications
- Presenting at conferences, such as the Western Society of Naturalists
- Inviting participation in a monitoring survey

STAY IN TOUCH

Stay connected and learn more about our work in the North Central Coast!

For full descriptions of the MPAs in the North Central Coast region, visit California Department of Fish and Wildlife at <http://www.dfg.ca.gov/marine>.

Follow the [North Central Coast page](#) on Oceanspaces.org for information about MPA engagement events and opportunities, access to data and reports, and the release of the monitoring survey and *State of the North Central Coast Region* report.

To receive updates on activities in this region and across the state, visit OceanSpaces.org to subscribe to a monthly newsletter.

CONTACT US

You are welcome to contact Dina Liebowitz with any questions at dina.liebowitz@oceansciencetrust.org or (510) 350-3464.

