



Central Coast Baseline Monitoring Results

A foundation for science-informed decisions for our oceans.

Scientific monitoring is essential to evaluate the effects of MPAs and inform ocean management. Here are key findings from the initial steps of monitoring in the Central Coast—providing a benchmark of ecological and socioeconomic conditions in the one to two years following MPA implementation and examining early changes that occurred from 2007 to 2012.

The scientific data gathered and analyses conducted add up to the most detailed picture created of current ocean conditions along California's Central Coast.

From ongoing MPA monitoring to fisheries and water quality management and climate change adaptation, this scientific benchmark provides a foundation for citizens, scientists and managers to keep a finger on the pulse of marine systems and make rigorous science-informed decisions for our oceans.

Visit OceanSpaces.org to view comprehensive results from baseline monitoring, download data, and find out more about the groups involved in monitoring.

Central Coast MPAs are on Track

Some species have demonstrated early changes

- In kelp forests, a range of economically important fishes, including cabezon, lingcod and black rockfish increased in abundance in MPAs compared to similar locations outside MPAs.
- On rocky shores, numbers and sizes of protected black abalone and harvested owl limpets have increased inside MPAs in this 5-year window.

Long-established MPA reveals the pace of change in marine life

- Monitoring results from one of the oldest MPAs in the region, Point Lobos, indicate that this MPA is home to higher numbers and larger individuals of economically important fishes than neighboring reefs, and reveal the pace of change in temperate marine ecosystems.

Fishing opportunities continue in a diversified local ocean economy

- Both recreational and commercial fishing continue to be an integral part of the Central Coast, and a shift in activities, such as whale watching tours offered by the CPFV fleet, demonstrate adaptation and resilience in the local ocean economy.

A benchmark established for evaluating future performance

- Kelp forests, rocky shores, mid-depth and deep ecosystems in the Central Coast region are characterized by distinct communities of marine plants, invertebrates and fishes. These communities are set amidst an intricate backdrop of variable geology, dynamic ocean conditions and complex human interactions.
- Commercial and recreational fishing industries are a reflection of a complex interplay among environmental and economic conditions, and the regulatory landscape. Monitoring results set the stage to evaluate long-term socioeconomic effects of the MPAs.

Looking Forward

Deeper understanding

- California's investment in seafloor mapping yielded the first comprehensive, high-resolution map of the state's sea floor. Valuable information detailing the full complexity and distribution of habitats, including key fish nursery habitats, adds to the body of science used to plan and cost-effectively manage the MPAs. This information will support future decisions on a range of ocean issues.
- The ecosystems-based approach to MPA monitoring sets the stage for an integrated approach to ocean science and management, incorporating threats such as impaired water quality from land-based sources.

Science-informed decisions

- Monitoring results can facilitate better decision-making on a variety of ocean issues, for example, informing adaptive management of the MPAs, informing fisheries management under the Marine Life Management Act (MLMA) and improving our understanding of how climate change affects marine systems.

Engaged communities

- Broad community involvement has laid the groundwork for increased stewardship and compliance in support of effective MPA management.

Durable partnerships

- Academic institutions, citizen scientists, fishing communities and state and federal agencies are poised to work together to conduct ongoing monitoring that is efficient and cost-effective.



For more information about continued MPA monitoring in the Central Coast, visit bit.ly/centralcoastmonitoring.