# **Frequently Asked Questions on California's Marine Protected Areas (MPAs)**

## What are marine protected areas, or MPAs?

Like parks protect wildlife and habitats on land, marine protected areas (MPAs) protect and restore wildlife and habitats along the coast of California. California's marine protected areas come in many "flavors"; the size and level of protection, including fishing restrictions, can vary from one area to the next. Also called underwater parks, they're designed to protect plants and animals within an entire ecosystem, rather than protecting just a single species. In December 2012, California became an international leader in ocean protection by completing the United States' first statewide network of marine protected areas that are designed to ensure healthy, vibrant ocean life for generations to come.

## Why do we need marine protected areas?

California's coastal waters are some of the richest in the world, but real problems lurk below the ocean's surface. Ninety percent of the big fish that existed in the 1950s are missing and three-fourths of California's kelp forest has disappeared since the 1960s<sup>1</sup>. Meanwhile, California fishing communities are still recovering from the collapse of the west coast groundfish fishery and the closure of all five commercial abalone fisheries. In numerous studies worldwide, MPAs have proven to boost fish size, abundance and diversity, and increase the productivity and resilience of the protected area.

#### How do they protect the entire ocean ecosystem?

Marine protected areas safeguard critical ocean habitat, allowing sensitive marine communities such as rocky reefs and seagrass beds to thrive and recover. These special places also protect biological hotspots and important foraging grounds. This in turn benefits a range of species including plants like bull kelp, invertebrates like sea stars, and marine mammals such as seals and otters. As safe havens, underwater parks offer a home and refuge for big, old, fat, female fish to recover, grow and replenish our oceans.

#### What can I do in an underwater park?

There are many ways to enjoy California's ocean parks. You can swim, dive, surf, kayak, watch birds and mammals and simply relax in nature. You can also bring your children to explore marine life in tidepools, as long as you take only photos and leave animals and shells where they are. Or, you can get involved in a citizen science project and help study wildlife and monitor ocean change, or become a volunteer educator who teaches visitors about life above and beneath the waves.

#### Is fishing and the take of marine life allowed?

Fishing and the take of marine life such as shellfish or seaweed is allowed in about half of California's marine protected areas. Each type or kind of marine protected area has different regulations; inside state marine parks, sport fishing is encouraged, but commercial fishing is prohibited. In state marine reserves, fishing is not allowed. It's best to visit the California Department of Fish and Wildlife website at www.dfg.ca.gov/mlpa to learn about the specific rules for each marine protected area.

## How big are most of the state marine protected areas, and how far out do they extend from shore?

All of California's state marine protected areas are located inside the state water boundaries within three

nautical miles from shore. Their size, shape and location vary. Some are only a few hundred meters out from the shore, and others extend out to the federal waters (three nautical miles). Each was designed as part of a statewide network, following a set of scientific guidelines.

## How do marine protected areas address water pollution?

The Marine Life Protection Act that created the underwater park system in California provides authority to regulate what is taken out of the ocean; other state and federal laws regulate what goes into the ocean. For example, Areas of Biological Significance, National Marine Sanctuaries and National Estuaries actually do have laws to promote better water quality. Water quality is an issue along California's coast, and marine protected areas can boost efforts to reduce pollution by attracting attention to our coast's ecological and economic value.

# How do the state marine protected areas affect the fishing industry?

California fishermen have suffered economic hardships in recent years due to declines in commercially important fish and inadequate management. For example, landings in the commercial rockfish fishery declined statewide by 95 percent over the past 25 years<sup>3</sup>. Marine protected areas can help restore the ocean ecosystem, which can improve the sustainability of commercial and recreational fishing, draw visitors, and enhance tourism, California's biggest coastal industry.

## The central coast MPAs have been in place for five years. What changes are you seeing?

Five years is a short period of time for recovery of marine populations to occur, so recovery is expected to continue over many years. Short-lived species such as oysters or clams can recover quickly, but many slow-growing species such as rockfish need more than five years to show signs of recovery. Some researchers, like Mark Carr of the University of California Santa Cruz, have seen some improvements in fish populations. Other scientists and fishermen are working together now to measure changes to tell us how our underwater parks are performing over time.

# What are you learning in other areas of California where marine protected areas have been in

**place longer?** In California's Channel Islands, where MPAs have been in place for 10 years, a 2012 study found that lobsters were more abundant and larger in protected areas, with over five more legal-sized lobsters caught per trap on average inside the refuges.<sup>2</sup> Recreational fishing in parts of the islands actually increased from 2003 to 2008, as did commercial landings for some of the Islands' largest fisheries, such as squid, urchin, lobster and crab. There are signs of success from places around the world that demonstrate the many benefits of conservation (see <a href="http://californiampas.org/pages/about/success.html">http://californiampas.org/pages/about/success.html</a>).

<sup>1</sup> Myers, A., Worm, B. (2003) Rapid worldwide depletion of predatory fish communities. Nature 423(280-283).

<sup>2</sup>Kay, M.C., (2012) Effects of marine reserves on California spiny lobster are robust and modified by fine-scale habitat features and distance from reserve borders. Marine Ecology Progress Series, April 2012

<sup>3</sup> Rockfish resources of the south central California coast: Analysis of the resources from party boat data, 1980-2005. Stephens, J. et al. (2006). CalCOFI Rep., Vol. 47, 2006