



Ocean Communicators Alliance

Marine Protected Area Docent Training Handbook

CENTRAL COAST



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California Coastal Commission

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V.1: June 2014

¹ The California Ocean Communicators Alliance (OCA) is a group of more than 300 professionals in ocean-related organizations, agencies and businesses who, in the course of their work, reach millions of Californians with ocean messages. The National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries, the California Natural Resources Agency, and aquarium partners organize and support the OCA. OCA members collaborate on common ocean messages and promote the Thank You Ocean public awareness campaign.

Purpose of the Ocean Communicators Alliance Marine Protected Area (MPA) Docent Training Handbook

Docents and naturalists play a critical role in helping to increase stewardship and educate the public on the importance of California's coast and ocean, and we hope this handbook will be a useful resource.

The Central Coast Marine Protected Area Docent Training Handbook is intended to be a resource for docents and naturalists who communicate about marine protected areas (MPAs). Through this handbook, docents and naturalists will learn about MPAs and will be better equipped to communicate about them, along the central coast in particular.

This handbook aims to include the most pertinent information about MPAs, with an emphasis on central coast MPAs. It includes links to additional information and can act as a stand-alone document or a chapter within an organization's existing docent training handbook. As new information and resources are developed, this handbook may be updated.

**The Central Coast Marine Protected Area (MPA) Docent Training Handbook
will introduce you to:**

**Federal and State Marine Protected Areas
California's Network of Marine Protected Areas
Central Coast Marine Protected Areas
Ocean Etiquette and Guidelines for Viewing Wildlife
How to Get More Involved in Your Local Marine Protected Areas
Links to Additional Resources**

Please contact Miho Umezawa at miho@thankyouocean.org if you would like more information or have any questions. Thank you.

Table of Contents

What are Marine Protected Areas?	1
Federal Marine Protected Areas	2
California Marine Protected Areas	3
Map of Statewide Marine Protected Areas	4
Managing Marine Protected Areas	5
Monitoring	
Enforcement and Compliance	
Education and Outreach	
Central Coast Marine Protected Areas	6
Map of Central Coast Marine Protected Areas	7
What You Might Find in Central Coast Marine Protected Areas	8
Species Benefiting from Marine Protected Areas in the Central Coast	8
What Changes are We Seeing?	10
Communicating about Marine Protected Areas	11
Ocean Etiquette and Guidelines when Viewing Wildlife	13
Dive Deeper into Marine Protected Areas!	14
Additional Resources and Information	15
Work Cited	19



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What are Marine Protected Areas?

Marine protected areas (MPAs) are places designated to help protect and restore marine life and habitats in the ocean. MPAs are among the most useful tools for helping protect the ocean, complementing other conservation efforts by providing a place for marine life to recover and thrive. Around the globe, from Hawaii to Australia, in the Pacific and the Indian Ocean, and elsewhere, thousands of MPAs representing 1.8 percent of the ocean protect marine life from the pressures of human activities (MPAtlas, 2014). MPAs are similar to national parks and forests on land in that they were created to protect and restore ocean habitats and increase the health, productivity, and resilience of ocean ecosystems. In general, MPAs are making a positive impact to the wildlife and the environment in California and provide natural classrooms, cherished recreational spots, and opportunities for exploration.



Diagram of potential benefits to marine life and habitat inside and out a marine protected area.

Why are MPAs Important?

By protecting ocean ecosystems, MPAs can be powerful tools for conserving and restoring ocean biodiversity. These special ocean areas also protect cultural and geological resources and can help sustain local economies.

In conjunction with other marine resource management, MPAs contribute to healthier, more resilient ocean ecosystems that can better withstand a wide range of impacts.

Documented benefits of marine protected areas across the globe include:

- Higher abundance and larger size of fish, invertebrates, and plants
- Increased biodiversity
- Greater biomass of targeted (fished) species
- Increased body size of animals

Source: Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO)

Federal Marine Protected Areas

Over the past century, more than 1,700 MPAs have been created in U.S. waters by a mix of federal, state, and local legislation, voter initiatives, and regulations, for fishery management, conservation, and cultural heritage purposes. There are numerous federal agencies that manage MPAs and can include national parks, estuarine research reserves, marine sanctuaries, wildlife refuges, and fishery reserves. For example, there are **14 National Marine Sanctuaries** that encompass more than 170,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument, located near the Northwestern Hawaiian Islands. The National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries works cooperatively with the public and federal, state, local officials, and tribal governments to promote conservation while allowing compatible commercial and recreational activities.

In California, there are both federal and state MPAs. Within California waters, there are four national marine sanctuaries which include the [Channel Islands](#), [Cordell Bank](#), [Gulf of the Farallones](#), and [Monterey Bay](#) National Marine Sanctuaries. They encompass beautiful rocky reefs, lush kelp forests, whale migration corridors, spectacular deep-sea canyons, and underwater archaeological sites. These federal MPAs share boundaries with several state MPAs and have different regulations.



NOAA Office of National Marine Sanctuaries

California Marine Protected Areas²

The waters off the coast of California are some of the most biologically rich in the world, but the ocean is showing significant signs of overuse and declining health due to habitat destruction, climate change, and depleted fisheries. As one approach to combat this issue, the Marine Life Protection Act (MLPA) was signed into law in 1999, and directed the State to redesign existing California MPAs to increase their coherence and effectiveness, and to the extent possible, function together as a network. Through this process, 124 marine protected areas were created, covering approximately 16 percent of all coastal state waters.

To account for regional differences, the State created **five** distinct MPA regions along 1,100 mile coastline from south to north. The five regions include the **south coast** (Point Conception to the California/Mexico border), **central coast** (Pigeon Point to Point Conception), **San Francisco Bay**³ (Golden Gate Bridge northeast to the Carquinez Bridge), **north-central coast** (Alder Creek near Point Arena to Pigeon Point), and **north coast** (California/Oregon border to Alder Creek near Point Arena).

California's new system of MPAs, completed in 2012, was designed through a collaborative public process. In each of the regions, a group of local, knowledgeable stakeholders worked together using science guidelines to map out protected areas for each region. . These stakeholders included commercial and recreational anglers, tribal and government representatives, educators/researchers, and conservationists. Once the MPA proposals were completed, they underwent scientific and policy review. Final proposals were forwarded to the California Fish and Game Commission (Commission) for consideration and public feedback, and eventually adoption and implementation. The Commission sets the regulations that the California Department of Fish and Wildlife (CDFW) enforces and implements.



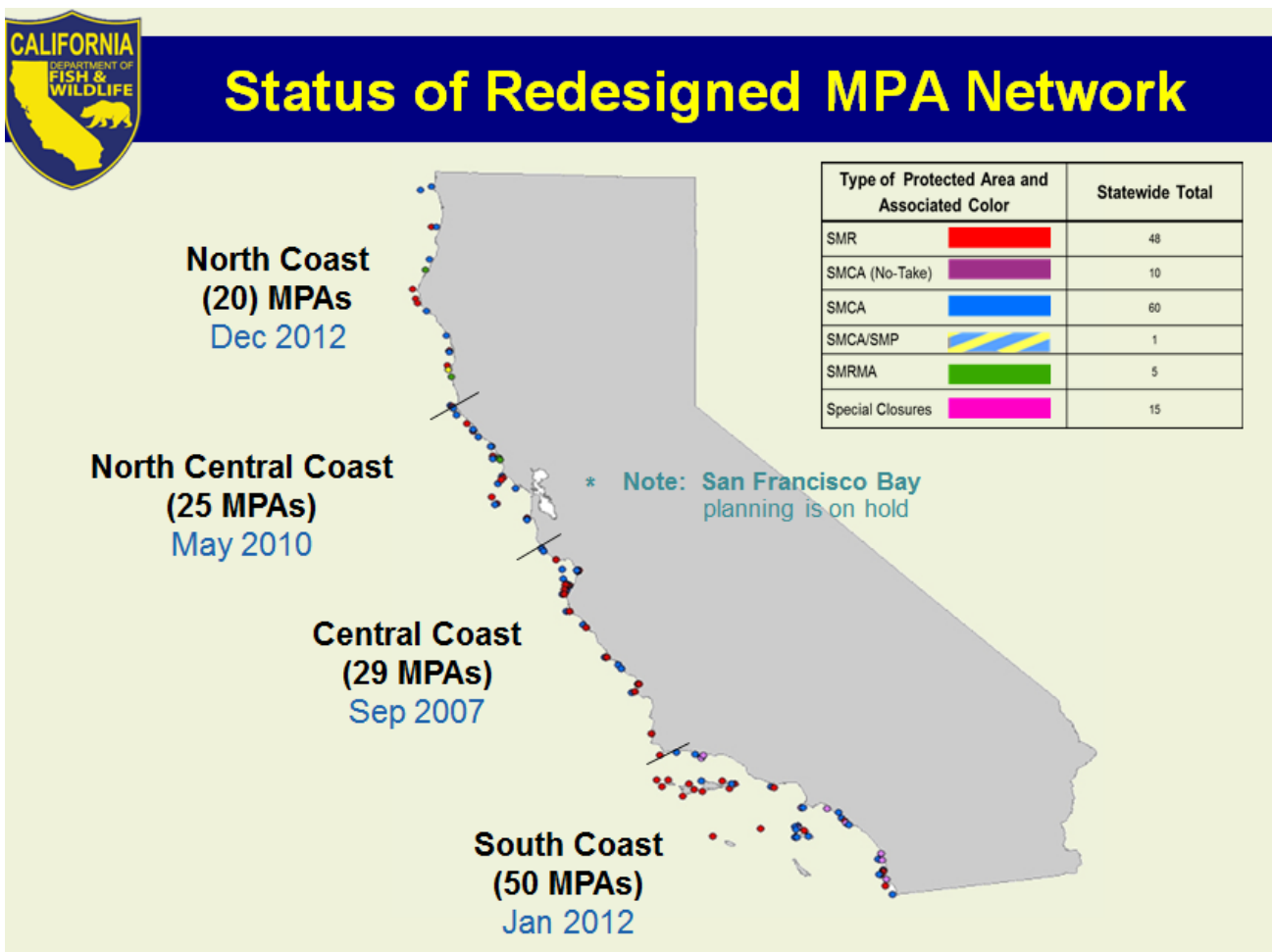
Dale Kobetich

²This information and more detail are found on the California Department of Fish and Wildlife website:

<http://www.dfg.ca.gov/marine/mpa/faqs.asp>

³ The San Francisco region is not complete and being developed for consideration at a future date

Map of Statewide Network of Marine Protected Areas



California Department of Fish and Wildlife

There are three main types of MPAs in California

In general,

1. **State marine reserves** do not allow any type of extractive or damaging activity (take) with the exception of scientific collecting under a permit.
2. **State marine parks** do not allow commercial take, but some types of recreational take may be allowed.
3. **State marine conservation areas** where take, damage, injury, or possession of any marine resource (living, geological, or cultural) is prohibited except for species expressly allowed for recreational and/or commercial take (species and gear exceptions vary by location).

There are many ways to enjoy California's MPAs - You can swim, dive, surf, kayak, watch birds and mammals, simply relax in nature, and explore marine life. While enjoying your MPAs, it is important that you understand the established regulations and follow them.

In the south coast region, there are **no-take SMCAs** where take, damage, injury, or possession of any marine resources (living, geological, or cultural) is prohibited except for take incidental to specified activities permitted by other agencies (for example, infrastructure maintenance and sand re-nourishment).

In addition, there are **State Marine Recreational Management Areas (SMRMAs)** which restrict the take of living marine resources, but allow for some recreational hunting opportunities; and **Special Closures** where there is localized protection for sea bird nesting and rookery sites, and marine mammal haul-out sites. These may overlap with other marine protected areas.

Managing Marine Protected Areas

There have been numerous activities and projects established to ensure that MPAs are successfully implemented and managed. In doing so, there are three critical components:

Monitoring

CDFW, with the help of numerous partners, is tasked with managing California's network of 124 MPAs. CDFW is utilizing an adaptive management strategy whereby future management plans are informed by scientific monitoring. Monitoring provides essential information to support MPA management decisions and inform other ocean policy. Monitoring tracks the condition or 'health' of ocean ecosystems and evaluates the effectiveness of management actions. Through a collaborative partnership with CDFW, university and agency researchers, Tribal governments, citizen scientists and fishermen are conducting research to establish a baseline for the health of our coastal ocean and track changes over time. Projects include mapping kelp canopy, counting fish and invertebrates using scuba and remotely operated vehicles (ROVs), and tracking fish landings and human use patterns. This information will provide a benchmark against which to measure the long-term performance of California's MPA network.

Enforcement and Compliance

Enforcement and compliance of MPA regulations can directly affect the success of MPAs. The CDFW is the primary agency responsible for enforcing MPA regulations and in the central coast has large patrol vessels that can respond to violations in progress and conduct general patrols. Partner agencies including California State Parks, the U.S. Coast Guard, and the NOAA also assist CDFW in enforcing resource-related activities or provide an additional enforcement presence, but they do not always have the necessary authority or training to take independent action. In the central coast region, enforcement officers report a relatively high level of compliance, although violations may occur when the public is unaware of the MPA boundaries and regulations. In 2009, for example, CDFW wardens caught a poacher who had taken 60 black abalone from a central coast MPA (California Ocean Science Trust and California Department of Fish and Wildlife, 2013).

Education and Outreach

Public education and outreach are vital to managing MPAs. These activities help by informing the public about MPA regulations, and in general, what MPAs are and why they are important to California's marine environment. CDFW is working with many organizations, including other agencies, tribes, non-profit organizations and for-profit businesses to develop education and outreach resources. In addition, MPA County Collaboratives, made up of local governments, fishing groups, tribes and conservationists, are also helping to install signs, coordinate volunteer programs, and promote awareness. ***Please see page 15 for the list of additional resources.***

Central Coast Marine Protected Areas

The central coast region of California, between Pigeon Point in the north and Point Conception in the south, was the first of the five regions to undergo the MPA site selection process. In 2007, California established a network of **29 MPAs**. Today, 18 percent of state waters in this region are protected by MPAs, with 7.5 percent being no-take state marine reserves. Included are 13 marine reserves, 14 marine conservation areas, 1 marine park, and 1 state marine recreational anagement area.

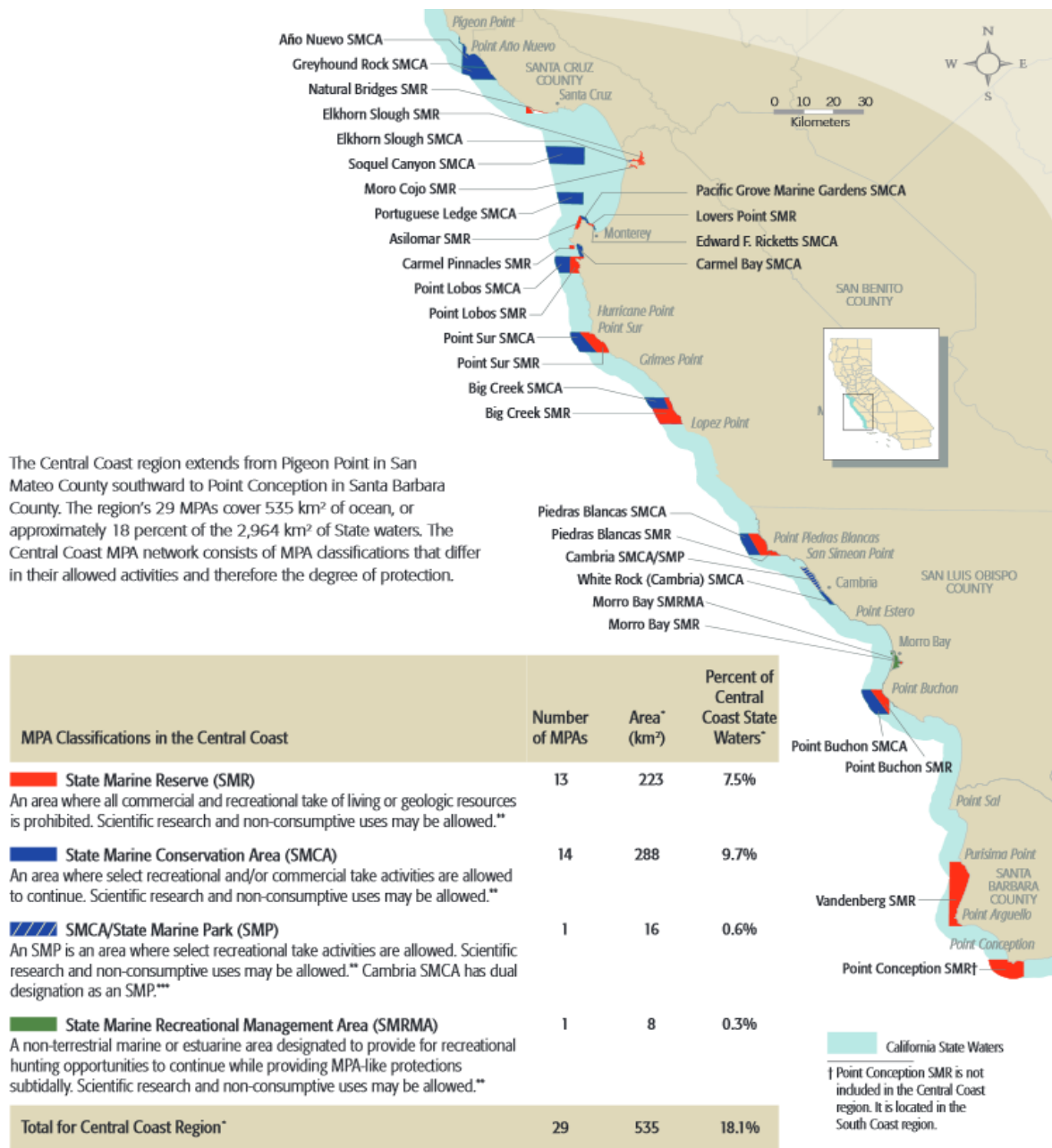
Central California waters are home to 26 species of marine mammals, 94 species of seabirds, 345 species of fish, 4 species of sea turtles, thousands of species of invertebrates and more than 450 species of marine algae.

The central coast region's MPA network includes some of the most beloved and key sections of our coast, including pristine kelp forests of **Point Lobos**, the winding waterways of **Elkhorn Slough**, the tide pools of **Natural Bridges**, the elephant seal rookery at **Piedras Blancas**, and the deep ocean habitats of **Soquel Canyon**.



Natural Bridges

Map of Central Coast Marine Protected Areas






California Ocean Science Trust and
California Department of Fish and Wildlife

What You Might Find in Central Coast Marine Protected Areas

California's central coast waters host diverse habitats from rocky tide pools to the continental shelf and slope, to large submarine canyons that reach close to shore. Upwelling of nutrient-rich water supports exceptionally diverse sea life. Intertidal zones include sandy beaches, rocky shores, coastal marsh, and tidal flats. Large and small estuaries where coastal streams meet the sea are a home and nurseries for fish, invertebrates, plants, birds, and mammals. There are two different types of kelp forest: giant kelp in the south, and bull kelp in the north, which each support different communities of fish. Due to various habitats and ecosystems, the central coast MPAs provide benefits to a wide range of species.

Species Benefiting from Marine Protected Areas in the Central Coast

	<p>Black Abalone (<i>Haliotis cracherodii</i>)</p> <p>Seven species of abalones are found in California. Abalones attach with a large foot to rocky substrate, and primarily eat bull kelp. They reach maturity at about 3 years old, or when they reach 1.5 inches in length. Over the years, black abalone have experienced significant decline in abundance due to overfishing and disease (withering syndrome), but there has been increase in size inside MPAs, suggesting increased compliance within MPAs and/or effective MPA enforcement.</p>
	<p>Lingcod (<i>Ophiodon elongatus</i>)</p> <p>Lingcod are unique to the west coast of North America. Their color ranges from dark brown or black to blue or green. Their underbellies are lighter. A lingcod's coloration makes this ambush predator well camouflaged in its rocky hideaway. The female usually produces between 60,000 and 500,000 eggs. The gelatinous egg mass weighs up to 15 pounds and measures 2.5 feet across. Based on monitoring, lingcod shows a general increase both inside and outside MPAs from 2007 to 2011.</p>
	<p>Northern Elephant Seal (<i>Mirounga angustirostris</i>)</p> <p>The largest seal in the northern hemisphere is the enormous male northern elephant seal, known for its long drooping nose (proboscis). Males can grow to 16 feet in length and weigh up to 5,000 pounds. The females are much smaller at 9 to 12 feet in length and vary from 900 to 1,800 pounds. Except for a short period of time when they breed and molt, the elephant seal lives up to 5,000 miles offshore and commonly descends to over 5,000 feet below the ocean's surface. You can view elephant seals from a distance at Ano Nuevo SMCA and Piedras Blancas SMR. Elephant Seal pups may benefit from MPA take restrictions as they may feed within MPA waters.</p>



Rockfish

There are 65 species of rockfish off of the Pacific coast. Many rockfish can live hundreds of years. For example, rougheye rockfish are the longest known living fish on earth and can live over 200 years. Based on the five year baseline monitoring program (2007-2012), seven of 10 species of rockfish studied at Año Nuevo, Point Lobos, Piedras Blancas, and Point Buchon were found to be larger in size inside the protected areas than outside.



Giant Kelp (*Macrocystis pyrifera*)

Kelp forests grow along rocky coastlines in depths of about 6 feet to more than 90 feet. Instead of tree-like roots that extend into the substrate, kelp has "anchors" called holdfasts that grip onto rocky substrates. A host of invertebrates, fish, marine mammals, and birds exist in kelp forest environments. Giant kelp is an extremely important part of many central California MPAs.



Owl Limpet (*Lottia gigantea*)

Algae that grow on the rocks are a main food source for owl limpets. A distinct behavioral characteristic of the owl limpet is that it is aggressively territorial and uses its shell to clean the space for the algae to flourish. The mucus secreted stimulates growth of the microalgae. Owl limpets increased in size between 2007 and 2011 with the greatest increases inside MPAs, suggesting protection from fishing pressure.



Southern Sea Otter (*Enhydra lutris*)

Although sea otters may or may not directly benefit from MPAs, they can often be viewed within them. They are the smallest marine mammal with females weighing up to 60 pounds and males reaching up to 90 pounds. Within the central coast, the sea otters prefer shallow waters and places with kelp to help anchor them while resting. They feed on nearshore shellfish including crabs, snails, sea urchins, sea stars, clams, and abalone.

What Changes Are We Seeing?

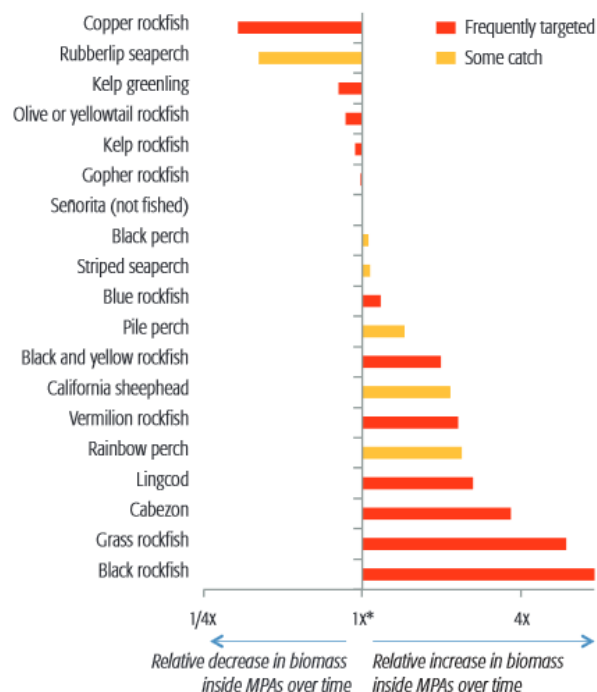
Seven years is a short period of time to detect any recovery of marine populations, but unmistakable changes within MPAs are expected within the coming decades. Short-lived species may show benefits sooner from protection within MPAs, but many slow-growing species such as rockfish need more than a few years to show signs of recovery.

Key findings from the first five years of monitoring indicate that the central coast MPAs seem to be on track:

- In kelp forests and on nearshore reefs a range of economically important fish species, including cabezon, lingcod, and black rockfish, have higher abundance in MPAs compared to reference areas.
- Owl limpets increased in size between 2007 and 2011 with the greatest increases inside MPAs, suggesting protection from fishing pressure.

In addition, fishing remains an integral part of the central coast ocean economy; monitoring results show limited effects of MPAs on the fishing industry. Also, the local ocean economy has responded in part by broadening to include additional non-consumptive activities such as an increase in whale watching tours. This demonstrates adaptation and resilience of coastal industries.

Changes in fish biomass



*Fish biomass equal within MPAs and reference areas.

This chart shows the changes in biomass of mature adult fish within kelp forests in the Central Coast between 2007 and 2011. As you can see, some fish species such as black rockfish, cabezon, and lingcod are increasing in abundance.

Source: State of the California Central Coast: Results from Baseline Monitoring of Marine Protected Areas 2007–2012.

California Ocean Science Trust and California Department of Fish and Wildlife, California, USA. February 2013

Communicating about Marine Protected Areas

When communicating about MPAs, the first rule is to meet people where they are: connect and share values, and bridge from familiar ideas to new ones. Positive language also tends to be more effective such as emphasizing what you can do and see in these special places rather than the activities that are restricted. Certain technical language, such as “adaptive management” or “biological diversity” may make people lose interest. Instead, use language that will relate MPAs to things people already care about and know.

It is also important to keep the message simple. Below are additional message tips:

1. Avoid abbreviations like “MPAs” when you first start talking about the issue in your materials or in face-to-face conversations. Instead, say “marine protected areas”.
2. Lead with local examples of protected areas, volunteer programs, etc.
3. Focus on the outcome of California’s Marine Life Protection Act rather than the planning process. Don’t talk about administrative process; rather emphasize that California’s marine protected areas were designed by local citizens and highlight the results. These MPAs are safe havens for sea life and wonderful places for ocean enthusiasts to experience nature.
4. Put people in the picture. Although MPAs benefit marine wildlife and their surrounding habitat, it’s also important to note that they are not the only ones benefiting: fishermen enjoy more bountiful catches, coastal businesses may see a boost in tourism, and tidepoolers and naturalists may see more wildlife.

These four key messages resonate well across the state:

- **Fertile old female fish:** This message creates a good visual and helps people understand that marine protected areas provide a place where some species of ocean life can feed, breed, and thrive. Certain species of big, old fertile female fish benefit from MPA protection.
- **Analogous to underwater parks:** To help people understand the concept of MPAs, a good way to start the conversation is to say MPAs are *like* the parks people visit and enjoy on land. You may want to pair this basic message with the name of the area (e.g., State Marine Reserve, State Marine Park, State Marine Conservation Area) to limit confusion.
- **What about me?:** Your MPAs are open for exploration! You can swim, dive, surf, tide pool, kayak, and watch birds and mammals within the limits spelled out in each MPA’s regulations. Connect to an example of a local MPA and include a list of what you can do as well as explicit limitations.
- **Legacy:** Marine protected areas ensure our kids and grandkids can enjoy a healthy, productive ocean.

Additional MPA messages that have been effective include:

California pride: California is leading the nation in ocean protection through the adoption of the nation’s biggest network of scientifically-based MPAs.

Prosperity: Our coastal ocean supports a \$39 billion economy, and 75% of ocean-related jobs are in tourism and recreation. Protecting ocean hot spots is a smart investment that will pay major dividends in coming years.

Examples of Messaging to Various Audience Groups

Central coast members of the Ocean Communicators Alliance came up with short, pithy messages directed at specific audience groups during a workshop in 2013. Depending on one's audience, the messaging may change as some topics resonate better than others. See the workshop proceedings here:

http://www.thankyouocean.org/wp-content/uploads/2013/06/130529_NCC_OCA_MPA_Workshop_Report_FINAL.pdf

Audience Group	MPA Messages
Non-Consumptive Users	“((ACTION)) your MPA! (Specific action; e.g., free dive); Come get your feet wet!”
Consumptive Users	<p>“We’re not leaving you with an empty line—we’re all in it for the big catch!” (in regards to messaging MPAs to fishermen)</p> <p>“MPAs help safeguard the future of fishing.”</p>
Ocean-Related Business	<p>“Sustaining the ocean, sustains our business”</p> <p>“Special places like Point Lobos draw ~400,000 visitors per year, benefiting local hotel, restaurant, and other business owners.”</p> <p>“Our coastal ocean supports a \$39 billion economy, and 75% of ocean-related jobs are in tourism and recreation!”</p>
Lawmakers (local, state, federal)	<p>“In Monterey County, marine protected areas are what we sell!”</p> <p>“The coast and ocean are Monterey County’s biggest tourist attraction and economic driver—and MPAs are a smart way to protect that natural capital.”</p>
Animal and Nature Enthusiasts	“MPAs mean more big, old fertile females which means more fish and marine wildlife for the future.”

Ocean Etiquette and Guidelines when Viewing Wildlife

These marine wildlife viewing guidelines include stewardship principles intended to help inform the public about safe and responsible wildlife viewing practices. Sharing these guidelines will help make sure wildlife stay safe while enhancing the visitor's experience.



Look in the right place...at the right time

These two components are crucial for successful wildlife watching. Many species live only in specific habitats such as estuaries, tidepools, kelp forests, or the open ocean, and wildlife may be more sensitive during particular times of year. In addition to seasons, the times of day and tidal cycles are important factors in viewing wildlife. To maximize viewing opportunities, learn about the activity cycles of the species of interest beforehand. Also know local access restrictions. Some areas may be closed seasonally to protect animals during sensitive times such as breeding and pupping.



Hands off

Never touch, handle, or otherwise disturb marine wildlife (some animals are protected by both federal and state laws). Touching wildlife or attempting to do so can injure the animal, put you at risk, and may also be illegal for certain species. The slimy coating on fish and many marine invertebrates protects the animal from infection and is easily rubbed off with a hand, glove, or foot.



Keep your distance

Use binoculars, spotting scopes, and cameras with zoom lenses to get a closer look. Marine wildlife may be very sensitive to human disturbance, and if cornered they can harm the viewer or leave the area. If wildlife approaches you, stay calm and slowly back away or place boat engines in neutral. When close encounters occur, do not make sudden moves or obstruct the travel path of the animals —let them have the unhindered “right of way”.



Follow good tidepooler rules

Never remove animals, shells, or rocks; never pick up animals; walk gently; and never turn over rocks. Help make sure that these organisms will still be here for many more generations.



Help others to become responsible wildlife watchers

Speak up if you notice other viewers behaving in a way that disturbs the wildlife or other viewers, or impacts sensitive habitats. Be friendly, respectful, and discrete when approaching others. Violations of the law should be reported to local authorities or call 1-888-DFG-CALTIP (1-888-334-2258).

Dive Deeper into Marine Protected Areas!

Can't get enough of MPAs? Here's a short list of additional MPA-related projects and activities around the central coast region. This isn't a comprehensive list, but you can get more ideas by visiting <http://californiampas.org/pages/supportmpas.html>

MPA Watch with the Otter Project

<http://www.otterproject.org/get-involved/volunteer/>
<http://mpawatch.org/> (in development)

The Otter Project trains volunteers to monitor resource use in and around MPAs from Año Nuevo State Park to Point Buchon in San Luis Obispo. Volunteers identify onshore and offshore ocean activities and collect data on resource use. MPA Watch volunteers play key roles as citizen scientists and collect data that will inform management decisions about the future of California's underwater state parks.



For more information contact Jeanée Natov at volunteer@otterproject.org

Sanctuary Exploration Center

<http://montereybay.noaa.gov/vc/sec/welcome.html>
<http://montereybay.noaa.gov/vc/sec/volunteer.html>

A located just step away from the ocean and Santa Cruz Wharf, the center features state-of-the art exhibits and interactive displays highlighting the sanctuary and its incredible underwater environment. Visitors can explore the sanctuary's remarkable marine environment as well as their personal role in protecting one of our nation's underwater treasures. The Exploration Center has volunteer docent opportunities too!

For more information, e-mail explorationcenter@noaa.gov.

Hunt for Hidden Treasures in California's Central Coast MPAs

<http://www.californiampas.org/pages/resources/onlineresources.html>

The Underwater Parks Ambassadors have hidden treasures or geocaches in several of California's central coast MPAs. Geocaching, a real-world treasure hunting game using GPS (global positioning system), allows people of all ages to explore the coastline in search of the cache boxes and the treasures within. Each geocache box contains information about MPAs, a logbook to sign your name, and fish magnets that are free for the taking.

New to geocaching? No problem! Visit the official geocaching website, <http://www.geocache.com>, for more information, access to tutorials, and links with tips and tricks for starting the hunt.

Geocaches are currently hidden in the following MPAs and more will be added soon! Enjoy the hunt!

- [Monterey Bay Sanctuary Exploration Center](#)
- [Elkhorn Slough](#)
- [Pt Lobos](#)
- [Pt Pinos](#) (Monterey Peninsula)
- [Natural Bridges](#)
- [Soquel Canyon/Portuguese Ledge](#)
- [Año Nuevo/Greyhound Rock](#)
- [Pt Sur](#)

- [Point Buchon](#)
- [Big Creek](#)

For more information, contact Danielle Brown at Danielle@californiamsf.org

Dive into California's Central Coast MPAs!

<https://tourbuilder.withgoogle.com/builder#play/ahJzfm3ZWltdG91cmJ1aWxkZXJyDAsSBFRvdXIYvrEhDA>

Explore California's MPA network without getting your feet wet through a new online tour! The Central Coast Google MPA Tour features detailed descriptions of each of the central coast MPAs, National Marine Sanctuaries, and National Estuaries with stunning photos and videos and links to local "things to do".

Find additional volunteer opportunities

<http://californiampas.org/pages/supportmpas.html>

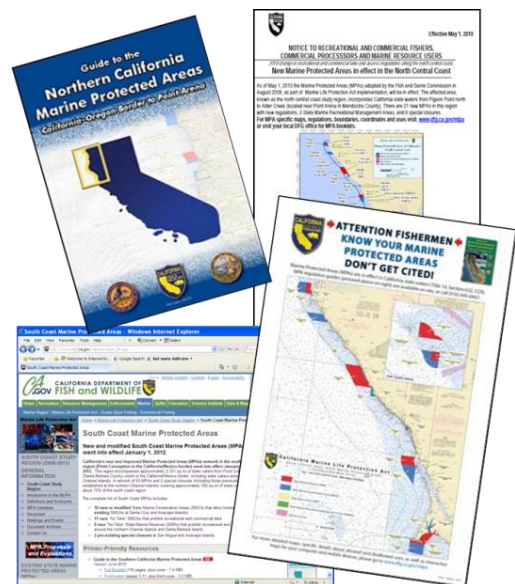
Additional Resources and Information

These resources provide links to additional information about each section. The links vary from education and outreach materials to scientific articles. This is not a comprehensive list of resources and we encourage you to explore the following websites for additional information:

- **Marine Protected Areas regulatory information (California Department of Fish and Wildlife):** www.dfg.ca.gov/marine/mpa
- **Compiled Marine Protected Areas educational resources:** <http://californiampas.org>

What are Marine Protected Areas?

- MPA Fact Sheet: http://www.californiampas.org/pubs/MPA_FAQ_sheet.pdf
- Thank You Ocean: Marine Protected Areas: <http://www.thankyouocean.org/threats/marine-life-decline/mpas/>
- Ocean Conservancy: <http://www.oceanconservancy.org/our-work/marine-protected-areas/>
- MPA Literature: <https://www.dfg.ca.gov/marine/mpa/science1.asp>
 - [MPA Design](#)
 - [MPA Effectiveness - Inside and Adjacent to MPAs](#)
 - [MPA Effectiveness and Fisheries Management](#)
 - [Social and Economic Analysis](#)
 - [Larval Production and Transport](#)
 - [MPA Modeling](#)
 - [Human Impacts on the Marine Environment](#)



Federal Marine Protected Areas

- NOAA Office of National Marine Sanctuaries: <http://sanctuaries.noaa.gov/about/welcome.html>
- National Marine Protected Areas Center: <http://marineprotectedareas.noaa.gov/>
- National Marine Protected Areas Center: *Conserving Our Ocean One Place at a Time*
http://marineprotectedareas.noaa.gov/pdf/fac/mpas_of_united_states_conserving_oceans_1113.pdf

California Marine Protected Areas

- California Department of Fish and Wildlife: <https://www.dfg.ca.gov/marine/mpa/intro.asp>

Central Coast Marine Protected Areas

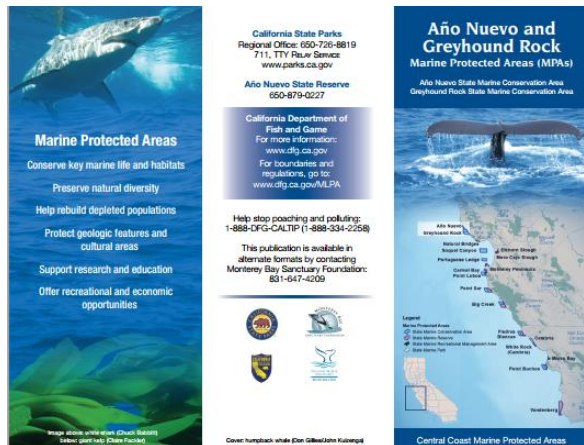
- California Department of Fish and Wildlife: Guide to Central California Marine Protected Area: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=46084&inline=true>
- California Department of Fish and Wildlife: Central Coast Brochure <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=58699&inline=true>
- California Department of Fish and Wildlife- Individual MPA maps: https://www.dfg.ca.gov/marine/mpa/ccmpas_list.asp
- Mobile MPA website can be viewed on any portable Internet-enabled device at www.dfg.ca.gov/m/mpa

Map of Central Coast Marine Protected Areas

- California Department of Fish and Wildlife: <https://www.dfg.ca.gov/marine/images/ccmpas130130.jpg>
- Individual MPA maps: https://www.dfg.ca.gov/marine/mpa/ccmpas_list.asp

Monitoring:

- MPA Monitoring Enterprise: <http://monitoringenterprise.org/where/centralcoast.php>
- Ocean Spaces – Central Coast Monitoring Community: <http://oceanspaces.org/organization/central-coast-monitoring-community>
- State of the California Central Coast Symposium: <http://oceanspaces.org/learn/state-california-central-coast-symposium>



Individual Central Coast MPA Brochures for the following MPAs:

- [Año Nuevo](#)
- [Elkhorn Slough](#)
- [Monterey Peninsula](#)
- [Morro Bay](#)
- [Piedras Blancas - White Rocks](#)
- [Point Buchon](#)
- [Point Lobos](#)
- [Point Sur](#)

Ocean Conservancy's MPA Fact Sheets for the following MPAs:

- [Año Nuevo State Marine Conservation Area & Greyhound Rock State Marine Conservation Area](#) (170K PDF file)
- [Natural Bridges State Marine Reserve](#) (172K PDF file)
- [Soquel Canyon State Marine Conservation Area and Portuguese Ledge State Marine Conservation Area](#) (192K PDF file)
- [Elkhorn Slough State Marine Reserve and Marine Park & Moro Cojo State Marine Reserve](#) (222K PDF file)
- [Edward F. Ricketts State Marine Conservation Area; Lovers Point State Marine Reserve; Pacific Grove State Marine Conservation Area; Asilomar State Marine Reserve](#) (179K PDF file)
- [Carmel Pinnacles State Marine Reserve and Carmel Bay State Marine Conservation Area](#) (163K PDF file)
- [Point Lobos State Marine Reserve and Marine Conservation Area](#) (196K PDF file)
- [Point Sur State Marine Reserve and Marine Conservation Area](#) (158K PDF file)
- [Big Creek State Marine Reserve and Marine Conservation Area](#) (175K PDF file)
- [Piedras Blancas State Marine Reserve and Marine Conservation Area](#) (156K PDF file)
- [Cambria State Marine Park and Marine Conservation Area](#) (151K PDF file)
- [Morro Bay East State Marine Reserve; Morro Bay State Marine Recreational Management Area](#) (146K PDF file)
- [Point Buchon State Marine Reserve and Marine Conservation Area](#) (174K PDF file)
- [Vandenberg State Marine Reserve](#) (143K PDF file)
- [MPA Fact Sheets - All](#) (1.2MB PDF file)



También está disponible en español:

- [Áreas Estatales de Conservación Marina, "Año Nuevo" y "Greyhound Rock"](#) (765K PDF file)
- [Reserva Marina Estatal "Natural Bridges"](#) (939K PDF file)
- [Áreas Estatales de Conservación Marina, "Soquel Canyon" y "Portuguese Ledge"](#) (1.19M PDF file)
- [Reserva Marina Estatal y Área de Conservación "Elkhorn Slough" y Reserva Marina Estatal "Moro Cojo"](#) (1.21M PDF file)
- [Reservas Marinas Estatales "Lovers Point" y "Asilomar", y Áreas Estatales de Conservación Marina "Edward F. Ricketts" y "Pacific Grove"](#) (916K PDF file)
- [Reserva Marina Estatal "Carmel Pinnacles" y Área Estatal de Conservación Marina "Carmel Bay"](#) (891K PDF file)
- [Reserva Marina Estatal y Área de Conservación Marina "Point Lobos"](#) (1.09M PDF file)
- [Reserva Marina Estatal y Área de Conservación Marina "Point Sur"](#) (870K PDF file)
- [Reserva Marina Estatal y Área de Conservación Marina "Big Creek"](#) (746K PDF file)

- [Reserva Marina Estatal y Área de Conservación Marina “Piedras Blancas”](#) (613K PDF file)
- [Parque Marino Estatal y Área de Conservación Marina “Cambria”](#) (1.01M PDF file)
- [Reserva Marina Estatal “Morro Bay East” y Área Estatal de Manejo Recreativo Marino “Morro Bay”](#) (793K PDF file)
- [Reserva Marina Estatal y Área de Conservación Marina “Point Buchon”](#) (831K PDF file)
- [Reserva Marina Estatal “Vandenberg”](#) (484K PDF file)
- [Todas Hoja Informativas \(14\)](#) (12.2M PDF file)

What You Might Find in Central Coast Marine Protected Areas

- Encyclopedia of the National Marine Sanctuary- Monterey Bay National Marine Sanctuary: <http://www8.nos.noaa.gov/onms/park/>
- NOAA Office of National Marine Sanctuaries. Responsibly Watching California’s Marine Wildlife Draft Handbook for Ocean Users: http://sanctuaries.noaa.gov/library/national/ww_handbook.pdf

Communicating about Marine Protected Areas

- Central Coast OCA MPA Workshop Report: http://www.thankyouocean.org/wp-content/uploads/2013/09/130910_CC_OCA_MPA_Workshop_Report.pdf
- MPA Global Success Stories: <http://californiampas.org/pages/about/success.html>
- Resource Media. July 2014. *Communicating the value of ocean protection*. http://www.resource-media.org/communicating-the-value-of-ocean-protection/#.U_TU9mNUhuN

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- Watchable Wildlife Incorporated. Marine Wildlife Viewing Guidelines: <http://sanctuaries.noaa.gov/library/national/oeguidelines.pdf>
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- NOAA Office of National Marine Sanctuary’s Pocket Guide: <http://sanctuaries.noaa.gov/library/national/oeguidelines.pdf>
- NOAA National Marine Sanctuaries: <http://sanctuaries.noaa.gov/protect/oceanetiquette.html>

Dive Deeper into Marine Protected Areas

- Beach Treasure Hunt: http://www.californiampas.org/pubs/educationalmaterials/CA_beach_treasure_hunt.pdf
- California Marine Sanctuary Foundation’s YouTube page: <https://www.youtube.com/user/MBNMSF>
- MPA Geocaching: <http://www.californiampas.org/pages/resources/onlineresources.html>
- MPA Watch with the Otter Project: <http://www.otterproject.org/get-involved/volunteer/>
- MPA Watch (in development): <http://mpawatch.org/>
- Volunteer Opportunities: <http://www.californiampas.org/pages/supportmpas.html>

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Marc Mantione: Sea Otter

ReefNews: Owl Limpet

Glenn VanBlaricom: Black Abalone

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