



Ocean Communicators Alliance

Marine Protected Area
Docent Training Handbook

NORTH CENTRAL COAST



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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 North 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.

This handbook aims to include the most pertinent information about MPAs, with an emphasis on California's North 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 North Central Coast Marine Protected Area (MPA) Docent Training Handbook will introduce you to:

**Federal Marine Protected Areas
California's Network of Marine Protected Areas
North 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.

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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 addition, many coastal areas have been important to native peoples, who have relied upon marine resources and the environment for their livelihoods and cultural values. Some California MPAs protect cultural heritage as well as sites of historical significance. Overall, MPAs provide natural classrooms, cherished recreational spots, and opportunities for exploration.



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

Why are MPAs Important?

By protecting ocean ecosystems, MPAs can be powerful tools for conserving and restoring ocean biodiversity. Some of 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.

National Marine Sanctuaries

There are three national marine sanctuaries within the north central coast region:

Cordell Bank (CBNMS): CBNMS is just north of the Gulf of the Farallones with its southern-most boundary located 42 miles north of San Francisco. The sanctuary is entirely offshore, with the eastern boundary six miles from shore and the western boundary 30 miles offshore. In total, the sanctuary protects an area of 529 square miles. The centerpiece of the sanctuary is Cordell Bank, a four-and-a-half mile by nine-and-a-half mile rocky undersea feature located 22 miles west of the Point Reyes headlands. The bank sits at the edge of the continental shelf and rises abruptly from the soft sediments of the shelf to within 115 feet of the ocean surface

Gulf of the Farallones (GFNMS): Designated in 1981, GFNMS spans 1,279-square-miles (966 square nautical miles) just north and west of San Francisco Bay, and protects open ocean, nearshore tidal flats, rocky intertidal areas, estuarine wetlands, subtidal reefs, and coastal beaches within its boundaries. In addition, GFNMS has administrative jurisdiction over the northern portion of the Monterey Bay National Marine Sanctuary, from the San Mateo/Santa Cruz County line northward to the existing boundary between the two sanctuaries.

Monterey Bay (MBNMS): Designated in 1992, MBNMS stretches from Marin to Cambria and encompasses a shoreline length of 276 miles and 4,601 square nautical miles of ocean, extending an average distance of 30 miles from shore. At its deepest point, MBNMS reaches 12,713 feet (more than two miles). It is one of our nation's largest marine sanctuaries, larger than Yellowstone National Park. The sanctuary contains our nation's largest kelp forests and one of North America's largest underwater canyons and closest-to-shore deep ocean environments.

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 decline, the Marine Life Protection Act (MLPA) was signed into California 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 MPAs were created, covering approximately 16 percent of all coastal state waters.

To account for regional differences, the State created **five** distinct MPA regions along California's 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).

The coastal, open ocean portion of 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 designed by the regional stakeholder group that the California Department of Fish and Wildlife (CDFW) manages, enforces and implements.



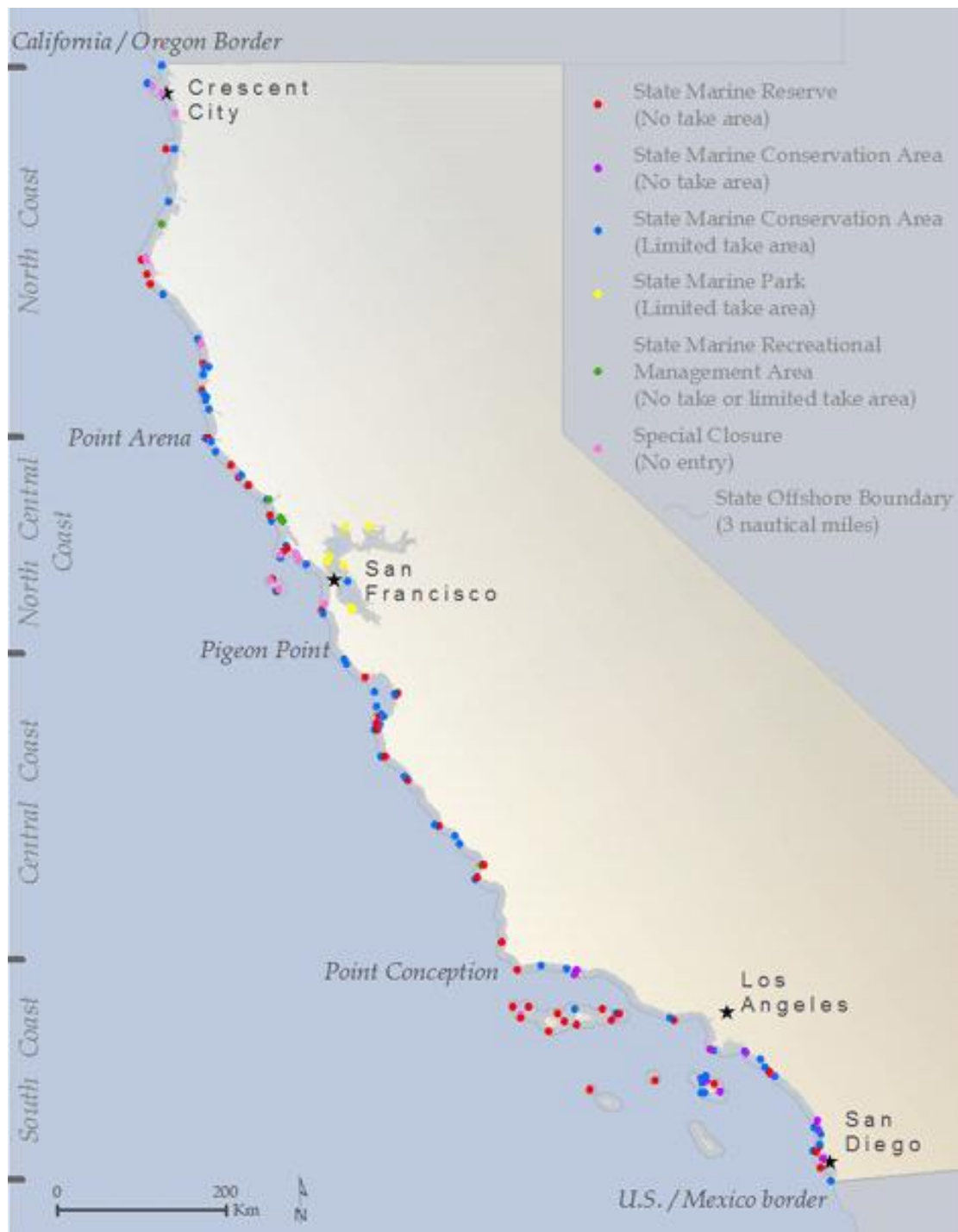
Dale Kobetich

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 Areas⁴



⁴ Because the San Francisco region is not complete and being developed for consideration at a future date, the MPAs in the San Francisco region (yellow dots) do not represent existing MPAs prior to the site designation process.

There are many ways to enjoy California's MPAs - You can swim, dive, surf, kayak, fish 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.

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).

In addition, **State Marine Recreational Management Areas (SMRMAs)** is an area that is unlawful to perform any activity that, as determined by the designating entity or managing agency, would compromise the recreational values for which the area may be designated. Recreational opportunities may be protected, enhanced, or restricted, while preserving basic resource values of the area; and **Special Closures** are areas designated by the Fish and Game Commission that prohibits access or restricts boating activities in waters adjacent to sea bird rookeries or marine mammal haul-out sites.

North Central California State Protected Areas			
Type	Number	Area (mi ²)	Percent of North Central California state waters
SMR	10	84.24	11.04%
SMCA	12	67.61	8.86%
SMRMA	3	0.56	0.07%
Special Closures ¹	6	1.16	0.15%
Total¹	25	152.41	19.97%

¹Totals do not include special closures



Bodega Bay Headlands, Paul Baker

Managing Marine Protected Areas

There have been many activities and projects established to ensure that MPAs are successfully implemented and managed. Numerous partnerships help support CDFW's mandate to manage California's network of 124 MPAs. CDFW is utilizing an adaptive management strategy whereby future management actions are informed by scientific monitoring. In managing MPAs, there are three critical components:

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. During the initial "baseline" phase of monitoring for each region (2010 – 2015 in the North Central Coast region) a broad set of partners, including university and agency researchers, tribal governments, citizen scientists and fishermen, have been working together to establish a benchmark of ecological and socioeconomic conditions when each regional MPA network took effect and document any initial socioeconomic and ecological changes in the region in the first few years following MPA implementation

Baseline MPA monitoring is supported with funds from the California Ocean Protection Council, and implemented through a collaborative partnership among CDFW, the Ocean Science Trust, California Sea Grant, and the Ocean Protection Council. Long-term MPA monitoring, beginning after the baseline period in each region, is guided by the statewide MPA monitoring framework and regional monitoring plans. ***You can learn more about the progress and status of MPA monitoring in each region through [OceanSpaces.org](http://oceanspaces.org/monitoring)*** (<http://oceanspaces.org/monitoring>)

Enforcement and Compliance

Enforcement and compliance of MPA regulations can directly affect the success of MPAs. CDFW is the primary agency responsible for enforcing MPA regulations. Partner agencies including California State Parks, the U.S. Coast Guard, and NOAA 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

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, academic and research institutions, and conservationists, are also helping to install signs, coordinate volunteer programs, and promote awareness.

Please see page 16 for a list of additional resources.



Times-Standard

North Central Coasts Marine Protected Areas

The North Central Coast region was the second of the regions to establish a network of MPAs. This region of our coast protects some of the most biologically diverse marine environments of California in areas such as the Point Reyes Peninsula, Bodega Bay headlands, and the tidepools of Montara and Gerstle Cove.

MPAs in the North Central Coast (Alder Creek near Point Arena to Pigeon Point) have been in effect since May 1, 2010. State waters in this area cover approximately 763 square miles of ocean, estuary, and offshore rock/island waters. The North Central Coast network includes 25 new or modified areas (22 MPAs and 3 marine recreational management areas) covering approximately 154 square miles or about 20 percent of the North Central Coast. Six special closures are also part of the network.

Map of North Central Coast Marine Protected Areas



Commonly-found Species that Benefit from North Central Coast Marine Protected Areas

North Central California's diverse marine habitats support thousands of species of invertebrates, plants, fish, marine mammals, and seabirds. Coastal bays, estuaries, and lagoons provide resting and feeding grounds for migratory waterfowl and shorebirds. Beneath the surface, eelgrass beds provide nursery areas for a variety of shrimp, fish, and crab. Bull kelp dominates rocky reefs close to shore, providing food for sea urchin and abalone, and a place to hunt and hide for lingcod, sculpin, and octopus.

North Central California waters are home to 26 species of marine mammals, 94 species of seabirds, 345 species of fish, 4 species of sea turtles, over 5,000 species of invertebrates and more than 450 species of marine algae.

Source: CDFW

The Farallon Islands provide important habitat for over two dozen threatened or endangered species, such as the ash storm-petrel and Steller's sea lion. Between the Islands and the Golden Gate, whales, dolphins, and other creatures feed and thrive in the food-rich Gulf of the Farallones.

Species in MPAs are more likely to benefit from protection if they meet one of more of the below conditions:

- they occur within the North Central Coast MPAs,
- they are taken directly or indirectly in commercial or recreational fisheries, and
- they have life history characteristics that make them more conducive to protection by MPAs, such as: sedentary behavior, long life spans, a relatively small home range, slow growth, or association with habitats that need additional spatial protection.

Below is a list of species likely to benefit from MPAs in the North Central Coast region that visitors might encounter:



Kawika Chetron

Cabezon (*Scorpaenichthys marmoratus*)

Cabezon means "large head" in Spanish, and they can gulp small, whole abalones, regurgitating the inedible shells. A cabezon's life cycle takes it offshore and back. Adults spawn on rocky outcrops, and males guard the eggs until they hatch. The larval young drift out to sea, then develop into small, silvery fish that often hide under mats of drifting kelp. As they grow older, the fish settle into tide pools, then move to reefs and kelp forests.



Brian E. Small

Brandt's Cormorant (*Phalacrocorax penicillatus*)

Brandt's Cormorants are large black birds with elongated necks. They can be seen fishing in large flocks, often mixed with other seabirds, and sometimes even foraging with sea lions. They can forage from the surface down to depths of up to 150 feet, with most foraging taking place close to the sea bottom. They are sociable and active in all seasons and will fly in long lines, low over the water, between feeding and roosting grounds.



Steve Holt/VIREO

Common Murre (*Uria aalge*)

Common murres are seabirds that spend eight or nine months of each year continuously at sea. Those short wings are perfect for diving and "flying" underwater. They don't build nests like many birds. Instead, the females lay their eggs on bare rock or soil on steep cliffs. Fortunately, the pear-shaped—or pyriform—eggs stay quite safe there. If an egg is disturbed, it pivots around its pointed end, whereas an oval egg might roll off the edge of the cliff.



Genny Anderson

Red Abalone (*Haliotis rufescens*)

The red abalone is the largest abalone species in the world, commonly measuring 6 to 8 inches across the widest part of the shell. The largest recorded red abalone was taken in September, 1993 off the Humboldt coast 12 5/16 inches. Abalone is a gastropod: a snail, in other words. Mostly sedentary, an abalone clings to rocks while waiting for a piece of kelp to drift nearby. The abalone clamps down on the kelp with its foot and then munches on the seaweed with its radula—a rough tongue with many small teeth.



Andrew Trites

Stellar Sea Lion (*Phalacrocorax penicillatus*)

Adult males may be up to 10-11 feet in length and can weigh up to 2,500 pounds. Females are smaller than males, at 7.5-9.5 feet in length and weigh up to 770 pounds. Steller sea lions exhibit sexual dimorphism, in which adult males are noticeably larger than females and further distinguished by a thick mane of coarse hair. Steller sea lions forage near shore and pelagic waters. They are also capable of traveling long distances in a season and can dive to approximately 1300 feet in depth.



Monterey Bay Aquarium

Wolf Eel (*Anarrhichthys ocellatus*)

The wolf-eel is not related to other eels; it's one of five species in the "wolfish" family. The other four species are not nearly so long and skinny. Wolf-eels mate for life, and the pair takes special care of its eggs as they develop. Beginning around age seven, the female lays up to 10,000 eggs at a time. They eat hard-shelled animals like crabs, sand dollars, and sea urchins.

Monitoring Marine Protected Areas in the North Central Coast

MPA monitoring in the North Central Coast region is guided by the MPA monitoring framework, which has been developed by a variety of partners to ensure monitoring meets the requirements of the Marine Life Protection Act. The first stage of MPA monitoring, known as the baseline period (2010-2015), is aimed at developing broad understanding of conditions in the region. Monitoring results from the baseline will provide a benchmark of conditions to assess future ocean changes and MPA performance. Long term MPA monitoring, beginning in 2016, will build on the foundation established through the Baseline Program to understand how MPAs are impacting ocean health.



In 2013, researchers across 11 projects completed baseline monitoring inside and outside MPAs in the region. With investment from the state – including \$4-million allocated by the California Ocean Protection Council and disbursed by California Sea Grant – California has developed the first regional snapshot in the North Central Coast. Collectively, the MPA baseline program forged strong partnerships among academic and citizen scientists, state and federal agencies, and nonprofit organizations. In addition to fostering new collaborations, the program brought in new volunteers and stakeholders, such as recreational fishermen. This broad community involvement laid the groundwork for increased stewardship and compliance in support of effective MPA management. Some program partners, such as PISCO and Reef Check California, have been monitoring the region for over a decade, allowing the baseline program to incorporate and build on their long-term datasets.

- **California Ocean Science Trust's North Central Coast – Summaries of Baseline MPA Monitoring Projects, 2010-2013:** <http://oceanspaces.org/sites/default/files/regions/files/ncc-regional-snapshot.pdf>
- **Find additional information:** <http://oceanspaces.org/monitoring/regions/north-central-coast/planning>

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 may help 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.



World Wildlife Fund

Examples of Messaging to Various Audience Groups

North 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	“Have you heard that you can see bigger (/diverse/unique) fish at the MPAs?” “Have you visited YOUR MPA?” <u>Key Ideas:</u> - Use members of this audience as ambassadors to further messages about MPAs and ocean protection - Emphasize what you can do in MPA's, not what you can't do. Speak from a place of “YES”! - Promote California's ocean culture- MPA's preserve the quality of the ocean and thus are a source of pride for residents and a reason for tourists to visit!
Consumptive Users	“We're all in it for the big catch!” <u>Key Ideas:</u> - Develop targeted materials (ex. Spanish speaking audience) - Person-to-person relationships are critical - Engage them in the conversation! - Foster a sense of ownership and pride - Make aware the benefits of MPAs to recreational anglers
Ocean-Related Business	“Marine parks, reserves and conservation areas will attract people to come enjoy and have great adventures in our thriving ocean. A healthy ocean sustains healthy businesses.” “Marine protected areas . . . have a great adventure in our thriving ocean!” <u>Key Ideas:</u> - One-on-one, face-to-face communication with the decision-makers within a business – build relationships, listen to concerns and needs, find common ground and common goals. - Cultivate a champion/advocate/spokesperson within an individual business or industry at large

Ocean-Related Business	- Establishing forums for transferring practical tools, knowledge and training regarding MPAs and their benefits to businesses and business people. - Outreach to clubs (e.g., recreation), business associations, and specialty publications. - Cultivate “competition” within an industry to be the most responsible, sustainable, “green” business – leverage public perceptions, concern with corporate responsibility - Use tangible, hands-on, visually-compelling props and examples when communicating with businesses
Lawmakers (local, state, federal)	“California’s network of MPAs are nationally and internationally recognized as an economic and environmental success.” “They are producing jobs, a more stable coastal economic base, and a healthy, productive ocean.” <u>Key Ideas:</u> A marine protected area “elevator speech” to legislators (and their staff), should incorporate three elements: 1. Economic success 2. Diversity of constituencies (e.g. unlikely allies) 3. Leadership - California’s national and international leadership - Present a brief (one-page) message - with links to further substance, facts, science and data. - Be graphically compelling - Use charts, maps, images that are self-explanatory - Tell a Story - That is compelling and puts a human face on the story. - Relate to the Legislators values, community and committee interests, politics and those of his/her constituents - Provide solid science to back up key points.
Animal and Nature Enthusiasts	“By supporting California’s network of MPAs, you will be able to see and enjoy an abundance of whales, seals, birds, and other wildlife, and increase the chances for your children and grandchildren to enjoy them for the rest of their lives.” <u>Key Ideas:</u> - If possible, take trips in the bay to see wildlife with experts - Relate closely to audience through individual activities/ interests - Emphasize the beautiful nature imagery - Provide lessons from charismatic and energetic scientists and naturalist - Use visual aids

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 before hand. 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 North 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

<http://mpawatch.org/>

California residents are embracing MPAs and joining local efforts to monitor them. They are making a difference in ocean protection – and you can too! This group of volunteers monitors the use of MPAs, providing a valuable look at how people are using these new conservation areas.

Dive into California's North Central Coast MPAs!

<https://tourbuilder.withgoogle.com/builder#play/ahJzfm3ZWltdG91cmJ1aWxkZXJyEQsSBFRvdXIYgICAgIzovwsM>

This tour explores the 25 MPAs and 6 special closures along California's North Central Coast as well as three National Marine Sanctuaries with breathtaking pictures and videos. Included are links to nearby activities to help you enjoy these special ocean areas.

Marine Protected Area County Collaboratives

<http://www.mpacollaborative.org/>

MPA Community Collaboratives provide local communities access to state agencies involved in MPA implementation and management. Community Collaboratives include governmental agencies (city, county, state, federal, and tribal), organizations, associations, and institutions that communicate regularly about the MPAs in a particular sub-region.

Reef Check California

http://reefcheck.org/rcca/rcca_home.php

Reef Check California aims to build a network of informed and involved citizens who support the sustainable use and conservation of our nearshore marine resources. To accomplish this, volunteers are trained to carry out surveys of nearshore reefs providing data on the status of key indicator species.

Seabird Protection Network

<http://farallones.noaa.gov/eco/seabird/welcome.html>

The Seabird Protection Network is a multi-organization collaborative that works to reduce human disturbance to seabirds and other marine wildlife along the California coast. The Network is modeled after the Audubon Society's chapter structure. Gulf of the Farallones National Marine Sanctuary, who manages the founding Chapter, facilitates program expansion and incorporates new Chapters as they develop.



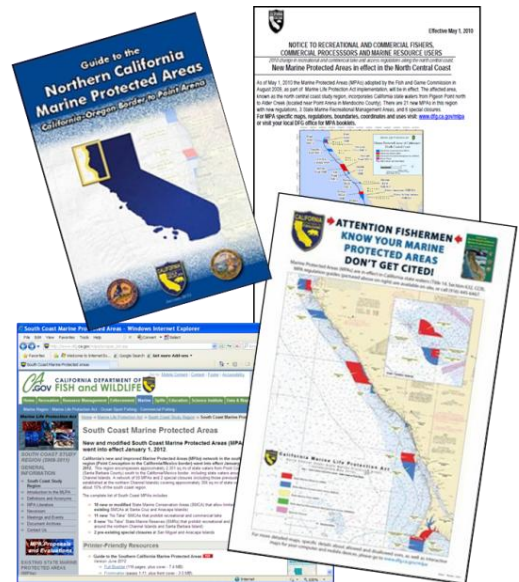
Additional Resources and Information

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

- Cordell Bank National Marine Sanctuary: <http://cordellbank.noaa.gov/>
- Gulf of the Farallones National Marine Sanctuary: <http://farallones.noaa.gov/>
- Monterey Bay National Marine Sanctuary: <http://montereybay.noaa.gov/welcome.html>
- 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>

North Central Coast Marine Protected Areas

- California Department of Fish and Wildlife: Guide to North Central California Marine Protected Area:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=46453&inline=true>

- California Department of Fish and Wildlife: North Central Coast Brochure: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=67521&inline=true>
- Mobile MPA website can be viewed on any portable Internet-enabled device at www.dfg.ca.gov/m/mpa

Map of North Central Coast Marine Protected Areas

- California Department of Fish and Wildlife: http://www.dfg.ca.gov/marine/mpa/nccmpas_list.asp
- California Department of Fish and Wildlife- Individual and overview MPA maps: http://www.dfg.ca.gov/marine/mpa/nccmpas_list.asp

Individual MPA Information for the following MPAs:

- | | |
|---|--|
| • Point Arena SMR | • Drakes Estero SMCA |
| • Point Arena SMCA | • Point Reyes SMR |
| • Sea Lion Cove SMCA | • Point Reyes SMCA |
| • Saunders Reef SMCA | • Duxbury Reef SMCA |
| • Del Mar Landing SMR | • North Farallon Island SMR |
| • Stewarts Point SMCA | • Southeast Farallon Island SMR |
| • Stewarts Point SMR | • Southeast Farallon Island SMCA |
| • Gerstle Cove SMR | • Montara SMR |
| • Salt Point SMCA | • Pillar Point SMCA |
| • Russian River SMCA | • Point Reyes Headlands SC |
| • Russian River SMRMA | • Point Resistance Rock SC |
| • Bodega Head SMR | • Double Point/Stormy Stack SC |
| • Bodega Head SMCA | • Egg (Devil's Slide) Rock to Devil's SC |
| • Estero Americano SMCA | • North Farallon Islands SC |
| • Estero de San Antonio SMRMA | • Southeast Farallon Island SC |
| • Estero de Limantour SMR | |

Commonly-found Species that Benefit from North Central Coast Marine Protected Areas

- California Department of Fish and Wildlife - California MLPA Master Plan Science Advisory Team: List of Species Likely to Benefit from Marine Protected Areas in the MLPA North Central Coast Study Region <https://nrm.dfg.ca.gov/documents/ContextDocs.aspx?cat=MLPA-NorthCentralCoast>
- 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

Monitoring Marine Protected Areas in the North Central Coast

- Ocean Spaces – North Central Coast Monitoring Community: <http://oceanspaces.org/community/north-central-coast-baseline-program-collaborators>
- Ocean Spaces – North Coast Monitoring: <http://oceanspaces.org/monitoring/regions/north-central-coast/planning>
- A Snapshot of the North Central Coast: <http://oceanspaces.org/sites/default/files/regions/files/ncc-regional-snapshot.pdf>

Communicating about Marine Protected Areas

- North Central Coast OCA MPA Workshop Report: http://www.thankyouocean.org/wp-content/uploads/2013/06/130529_NCC_OCA_MPA_Workshop_Report_FINAL.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/#.UTU9mNUhuN>

Ocean Etiquette and Guidelines when Viewing Wildlife

- Watchable Wildlife Incorporated. Marine Wildlife Viewing Guidelines: <http://sanctuaries.noaa.gov/library/national/oeguidelines.pdf>
- Watchable Wildlife Incorporated. Marine Wildlife Viewing Guidelines (SPANISH): http://sanctuaries.noaa.gov/library/national/oeguidelines_spanish.pdf
- 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

- California Marine Sanctuary Foundation's YouTube page: <https://www.youtube.com/user/MBNMSF>
- Friends of Fitzgerald Marine Reserve: <http://www.fitzgeraldreserve.org/newffmrsite/volunteer/>
- Intertidal Biodiversity Survey at Pillar Point: <http://www.inaturalist.org/projects/intertidal-biodiversity-survey-at-pillar-point>
- MPA County Collaboratives: <http://www.mpacollaborative.org/>
- MPA Watch: <http://mpawatch.org/>
- Seabird Protection Network: <http://farallones.noaa.gov/eco/seabird/welcome.html>
- Volunteer Opportunities: <http://www.californiampas.org/pages/supportmpas.html>

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<http://californiampas.org/pages/resources/cool-dyk-rockfish.html>

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