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*California's Marine Protected Areas are powerful tools to help conserve and protect the structure, function and integrity of marine ecosystems and wildlife. Through a diverse network of partners, Californians are joining together to establish a legacy of ocean stewardship for future generations.*

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## CDFW MARINE REGION MISSION

To protect, maintain, enhance, and restore California's marine ecosystems for their ecological values and their use and enjoyment by the public through good science and effective communication.



## THE CALIFORNIA NETWORK OF MARINE PROTECTED AREAS

### GOALS OF CALIFORNIA'S MPA NETWORK:

- Conserve key marine life and habitats
- Preserve natural diversity
- Help rebuild depleted populations
- Protect geologic features and cultural areas
- Support research and education
- Offer recreational and economic opportunities

Find marine protected area information from your cell phone or other mobile device:

[www.wildlife.ca.gov/m/MPA](http://www.wildlife.ca.gov/m/MPA)



Visit the California MPA Website:

[www.wildlife.ca.gov/MPAs](http://www.wildlife.ca.gov/MPAs)



Gopher Rockfish (cover photo): Chad King, NOAA MBNMS  
Diver (photo): Jerry Loomis

Girl looking over the ocean (photo): Marnin Robbins  
Worldwide MPAs (illustration): NOAA and IUCN (UNSP-WDPA)  
California coast (photo): CDFW

Rockfish fecundity (illustration): citation- Love et. al., NOAA Tech. Rep. 1990  
MPA species and habitats (inside cover illustration): Gary Bloomfield

 OSP 17 142571



*Safeguarding an Underwater Wilderness*

*Craig Shuman  
Marine Region Manager  
California Department of Fish and Wildlife*

## *The California Network of Marine Protected Areas (MPAs) is leading the way for ocean conservation.*

Just as our nation's parks and wilderness areas protect special places on land, California's MPAs protect a wide array of ocean and estuarine habitats and species. From rocky intertidal zones to tranquil estuaries, and from lush kelp forests to deep underwater canyons, California's MPAs are places where human disturbance is limited.

Generations ago, visionary leaders recognized the importance of protecting landscapes like Yosemite Valley in the Sierra Nevada. Their work built a conservation movement that helped protect millions of acres across the globe. That ethic continues today through the creation of MPAs, including the California MPA Network.

By setting aside areas of our marine environment where consumptive activities are limited or excluded altogether, Californians are helping protect the ocean's bounty and beauty for future generations.

### **MAKING HISTORY**

In 1999, the California Legislature passed the Marine Life Protection Act (MLPA). This landmark law required the design of a network of MPAs based on local knowledge and the best available science.

The MPA Network was planned regionally over a period of 13 years, and included input from conservationists, fishermen, Tribes, agency representatives, scientists, and others.

In 2012, California finalized the nation's first statewide, science-based network of marine protected areas. It is the largest ecologically connected MPA network in the world.

#### **MPAs Before the MLPA**



**2.7%**

Area of CA waters with MPAs (1999)

#### **MPAs After the MLPA**



**16.1%**

Area of CA waters with MPAs (2012)

### **HOW MPAs WORK**

California's MPAs limit fishing and/or other human impacts, which may increase the size, abundance, and diversity of species that spend all or portions of their lives within them.

The California MPA Network includes MPAs with different levels of protection; some MPAs prohibit the disturbance of any marine resource while others allow the take of particular species.



Unlike the MPAs that existed prior to the MLPA, today's MPAs work as part of a larger whole.

#### **California MPA Habitats**

By including the full range of marine habitats found in California waters, and placing MPAs in strategic proximity to each other, the California MPA Network can help preserve the connections and flow of life between marine ecosystems.

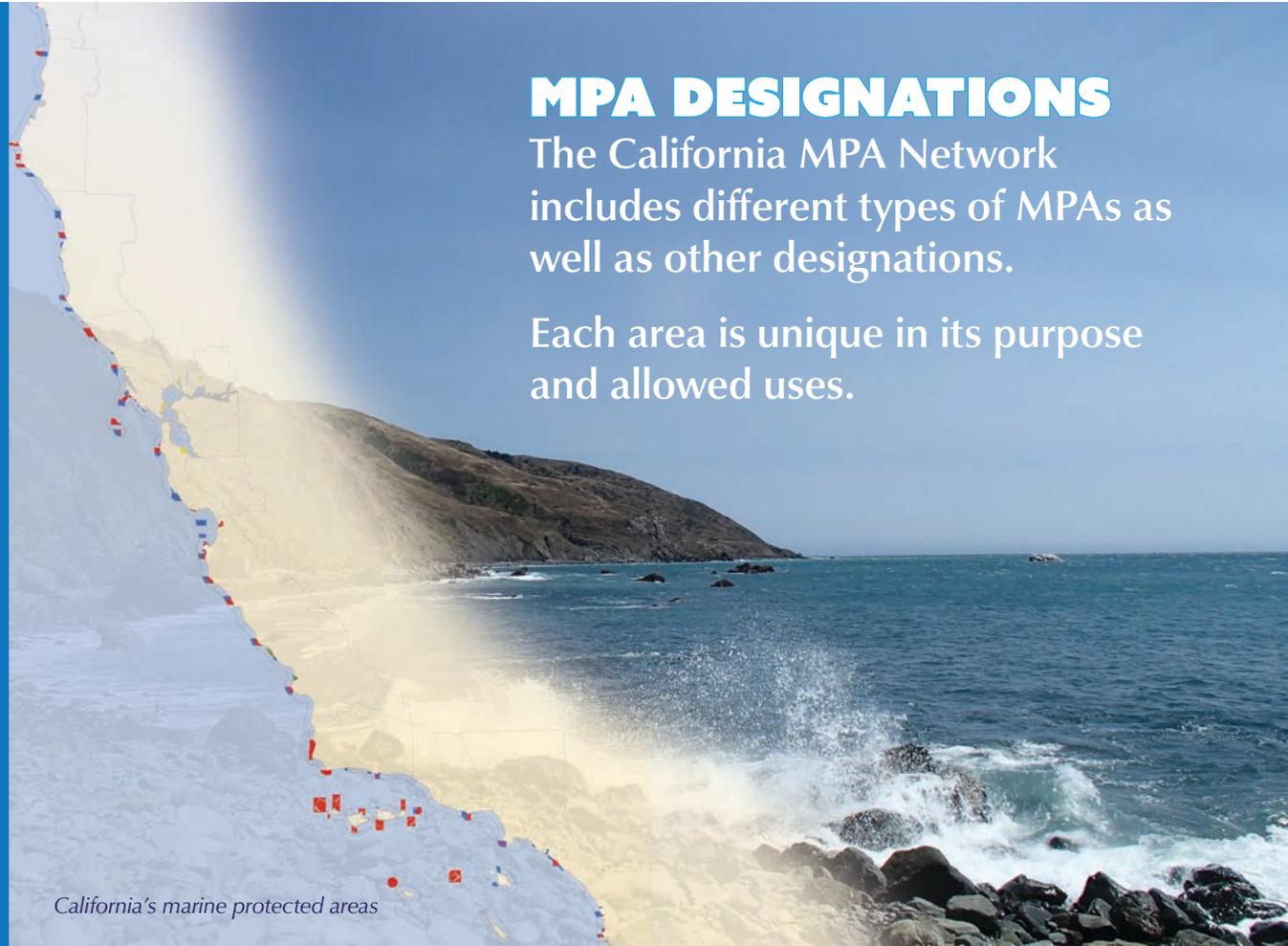


## MPAs ACROSS THE GLOBE

Although many tools are used to safeguard marine ecosystems around the world, marine protected areas can be among the most useful. MPAs come in different sizes and have many uses, from protecting entire ecosystems to safeguarding particular fisheries, rare species, critical habitats, and underwater historical sites.

Internationally, MPAs also differ in what they allow. Some are “no take” reserves that ban all fishing, drilling, and other extractive activities. Others permit some commercial and/or recreational fishing. Most allow research, education, and recreation. Today, roughly 3 percent of the world’s oceans are protected by MPAs.

Scientific studies show that given enough time, MPAs can increase the size, abundance, and diversity of marine species within and outside their borders. Those benefits are important to wider marine ecosystems and to the fishing communities who depend on them.



## MPA DESIGNATIONS

The California MPA Network includes different types of MPAs as well as other designations.

Each area is unique in its purpose and allowed uses.

 **State Marine Reserve (SMR):** An MPA where no take, damage, injury, or possession of any living, geologic, or cultural marine resource is allowed.

 **State Marine Conservation Area (SMCA):** An MPA where some recreational and/or commercial take of marine resources may be allowed (restrictions vary).

 **No-Take State Marine Conservation Area (No-Take SMCA):** An MPA where no take of any living, geologic, or cultural resource is allowed, EXCEPT for take incidental to specified activities permitted by other agencies (e.g. infrastructure maintenance, sand renourishment).

 **State Marine Recreational Management Area (SMRMA):** A marine managed area where some take of marine resources may be allowed and legal waterfowl hunting is allowed (restrictions vary).

 **State Marine Park (SMP):** An MPA that allows some recreational take but does not allow commercial take.

 **Special Closure:** Prohibits or restricts access in waters adjacent to seabird rookeries or marine mammal haul-out sites.

## THE SCIENCE OF MPAs

In order to meet the goals of the MLPA, California's newly created MPAs were designed with specific design criteria:

1. Key marine habitats should be represented in multiple MPAs, including rocky reefs, intertidal zones, sandy or soft ocean bottoms, underwater pinnacles, seamounts, kelp forests, submarine canyons, and seagrass beds.
2. MPAs should be large enough to protect adult populations of targeted species.
3. MPAs should be spaced close enough together to allow for the dispersal and replenishment of young between adjacent MPAs.
4. MPAs should include replicates of habitat-types in order to buffer against catastrophic loss in any one MPA.

Using these science guidelines, stakeholders designed the MPA Network to limit impacts on existing consumptive and non-consumptive activities.

## GROWING BIG FISH

One of the greatest benefits of MPAs can be in protecting big old fertile female fish. As many species of fish and invertebrates get larger, the number of offspring they produce grows exponentially. Given enough time, those offspring may increase the abundance of populations in MPAs and help repopulate adjacent waters.

## MANAGING MPAs

The California Department of Fish and Wildlife works in collaboration with state and federal agencies, as well as local partners, to manage the MPA Network. This includes outreach and education, enforcement and compliance, policy and permitting, and research and monitoring. Management of the Network is adaptive: MPA performance is evaluated based on monitoring results, and management is adapted to ensure the MPAs are meeting their goals.

## MPAs: FOR THE FUTURE

In order to ensure that California's MPAs fulfill the goals of the MLPA, a rigorous process of monitoring, research, and evaluation began in 2007. This endeavor will continue into the foreseeable future. Because fish and invertebrate species, and the habitats they depend on, often take many years to show benefits from resource management decisions, it is still too early to say that the MPA Network is "working" as intended. In spite of this, Californians can give their MPAs a fighting chance at success by learning about MPAs, the resources they protect, and following the rules while in them.

**Your actions today can help build an abundant and resilient ocean for the future.**

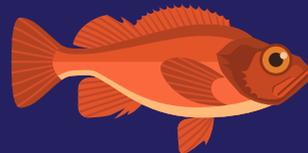
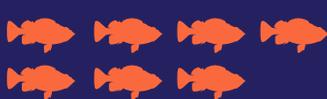
*As fish grow larger, the number of offspring they produce grows exponentially.*



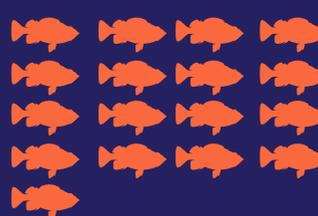
15 inches



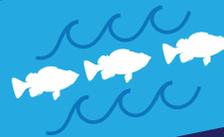
20 inches



24 inches



 = 100,000 babies



*Larvae and young drift outside of MPAs, replenishing adjacent waters.*



# KEY HABITATS IN CALIFORNIA'S MPAs

In order to benefit California's marine and estuarine environments, the MPA Network contains representative habitats found throughout coastal waters, including estuaries, intertidal zones, rocky reefs, kelp forests, soft-ocean bottoms, and submarine canyons.

## ESTUARIES

Estuaries are areas where ocean and freshwater meet. In addition to being "nurseries of the sea," estuaries help protect the ocean by filtering polluted runoff and buffering coastal areas from extreme weather conditions.

## KELP FORESTS

Like trees in a forest, these giant algae provide food and shelter for countless organisms, including many species of rockfish, invertebrates, and marine mammals.

## SOFT-OCEAN BOTTOMS

Unlike the shelter provided by rocky reefs or kelp forests, soft bottom habitats leave organisms exposed to waves and predation. Many animals survive by digging down or disguising themselves to blend-in with the sea floor.

## INTERTIDAL

From rocky tide pools to windswept beaches, the surf zone is an area of harsh extremes. Organisms must adapt to ever changing conditions; alternately submerged and pounded by waves, then parched by salt, sun and wind.

## SUBMARINE CANYONS

Formed by earthquakes and the scouring of sediment, submarine canyons are filled with beautiful and bizarre organisms that thrive in absolute darkness.

## ROCKY REEFS

Submerged outcrops with varying relief, rocky reefs provide oases to a diversity of sea life. While corals and invertebrates cling to steep walls, and rockfish find safety in numbers, predators like sharks and sea lions hunt for their next meal.