A GUIDE TO CATALINA ISLAND'S MARINE PROTECTED AREAS

CALIFORNIA MARINE PROTECTED AREAS

LOS ANGELES MPA COLLABORATIVE

Catalina Island MPA Collaborative

Photo: Kyle McBurnie

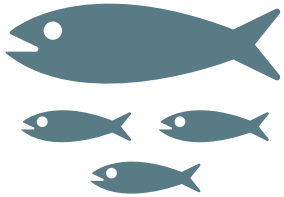
Oceans in Crisis

Our marine ecosystems have undergone traumatic stress due to

- Overfishing/hunting
- Habitat loss
- Pollution and disease
- Development
- La Nina and El Nino
- Natural disasters
- Invasive species
- Impaired water quality
- Climate change

Fish stocks have declined significantly

- 90% of all LARGE fish including Tuna, Marlin, Swordfish, Sharks, Cod and Halibut are gone
- Globally, fishermen's catch has been reduced by half since 1990, and the fish caught are 45% smaller



- 75% of kelp forests along the Southern California coast have vanished in the last 50 years (variable over years)
- White and Black Abalone are two of the species in the region that are listed as State and or Federally endangered

Photo: Lilian Carswell/USFWS

What Are MPAs?

Marine protected areas, or MPAs, are areas of coastal ocean set aside to protect ocean life and habitat.

Natural and/or cultural resources are given greater protection than the surrounding waters

Photo: Port of Los Angeles

Why are MPA's Effective?

Based on a global review of 124 marine reserves:

Bigger Fish

Body size increased by an average of 28%

More fish

Density increased by an average of 166%

Partnership for Interdisciplinary Studies of Coastal Oceans. 2007. "Science of Marine Reserves" (2nd Edition, United States Version).

Photo: Shane Anderson

- Species diversity increased by average of 21%
- Fished species often showed the most notable increases
- Established MPAs are more resistant to invasive species

Partnership for Interdisciplinary Studies of Coastal Oceans. 2007. "Science of Marine Reserves" (2nd Edition, United States Version).

Goals of MLPA

(Marine Life Protection Act)

1. Protect the natural diversity and function of marine ecosystems

2. Help sustain and restore marine life populations

3. Improve recreational, educational, and study opportunities in areas with minimal human disturbance

4. Protect representative and unique marine habitats

5. Define clear objectives, effective management, adequate enforcement

6. Ensure that MPAs are designed and managed as a network

> The Marine Life Protection Act (1999) directs the state to redesign California's system of marine protected areas (MPAs) to function as a network in order to: increase ***coherence and effectiveness*** in protecting the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to ***improve recreational, educational and study opportunities*** provided by marine ecosystems subject to minimal human disturbance.

-CA Department of Fish & Wildlife

CA has over **124** state marine protected areas and special closure zones-**16%** of the state's coastal waters!

Types of MPAs in California

SMR - State Marine Reserve, no take

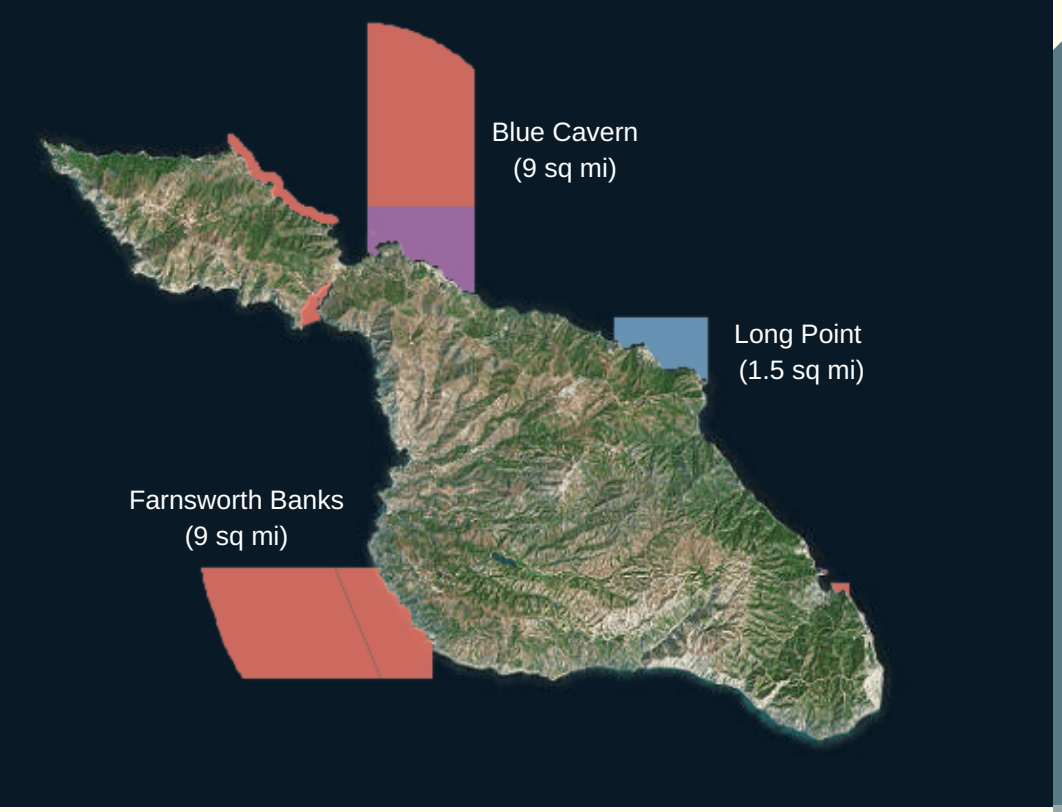
SMCA (no take) - State Marine Conservation Area (No Take) prohibits the take of living, geological and cultural marine resources, but allows potentially affected and ongoing permitted activities such as dredging and maintenance to continue

SMCA - State Marine Conservation Area, allows or limits selected recreational and/or commercial take

SP - Special Closure and area 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 (restrictions apply)

ASBS – Areas of Special Biological Significance (water quality)

National Marine Sanctuaries federally designated areas in US waters that provide protection of the marine environment



Catalina Island MPAs

Arrow Point to Lion Head Point State Marine Conservation Area

Blue Cavern State Marine Conservation Area (Onshore & Offshore)

Farnsworth State Marine Conservation Area (Onshore & Offshore)

Casino Point State Marine Conservation Area

Lover's Cove State Marine Conservation Area

Cat Harbor State Marine Conservation Area

South Coast MLPA Implementation

15% of SoCal waters now in MPAs

52 MPAs (36 new)

12% fully protected marine reserves (including Channel Islands)

~3% partially protected marine conservation areas

Channel Islands

Marine Protected Areas

First 5 Years of Monitoring: 2003–2008

Signs of Success

First 5 Years of MPAs at the Channel Islands

Targeted species responding to MPAs

Fish density 1.5 times higher inside reserves than outside

On average, fish are larger

Kelp forests are healthier

No significant economic losses experienced

Increased sport fishing and commercial catch

Community Stewardship & MPA Monitoring

Education & outreach

Adaptive management & monitoring

Ecological

Socioeconomic

Human use: MPA Watch

Integration with other ocean issues

Innovative partnerships for effective implementation-
Regional MPA Collaboratives

MPA COLLABORATIVE NETWORK