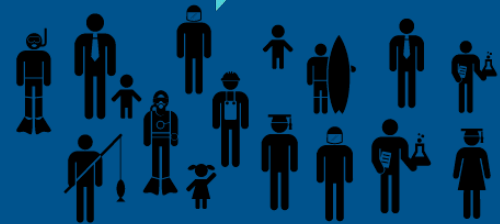


CINMS Management Plan Update Process

Update for the Sanctuary Advisory Council

January 22, 2021



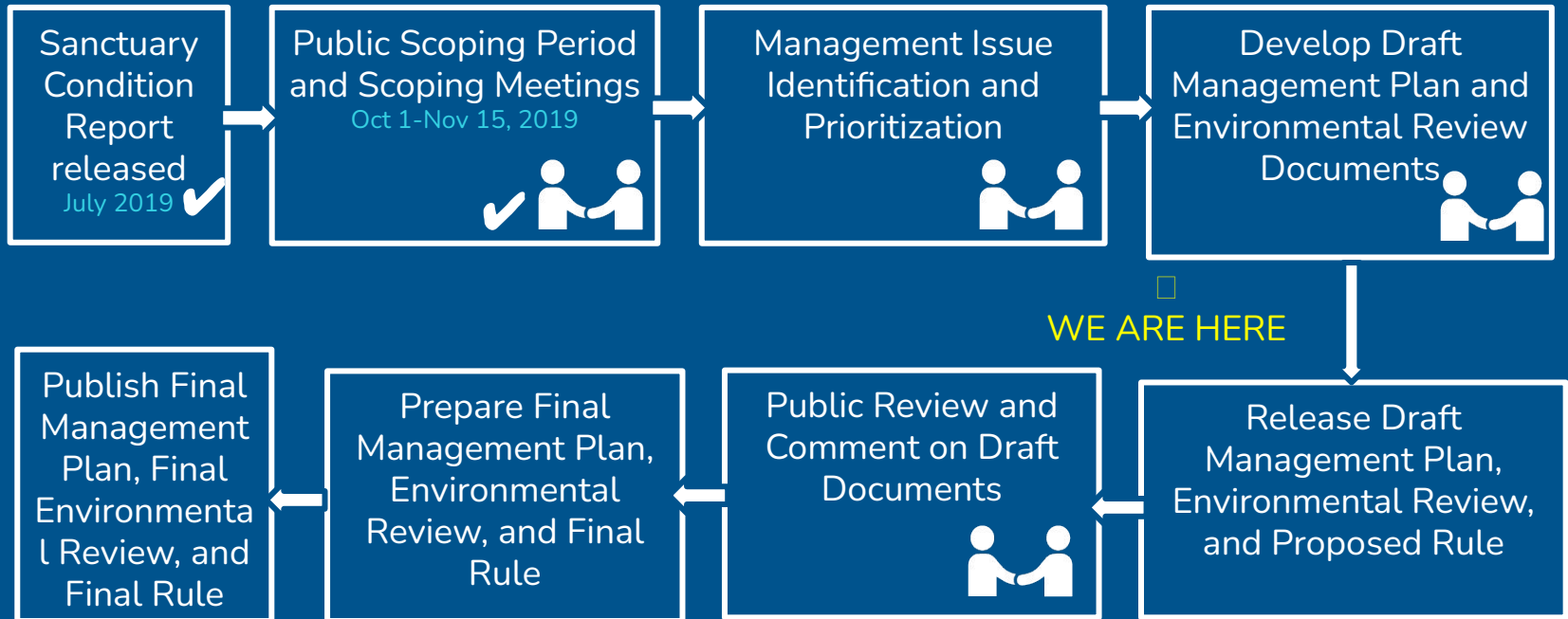
Status of Management Plan Update Process



= public and advisory council input



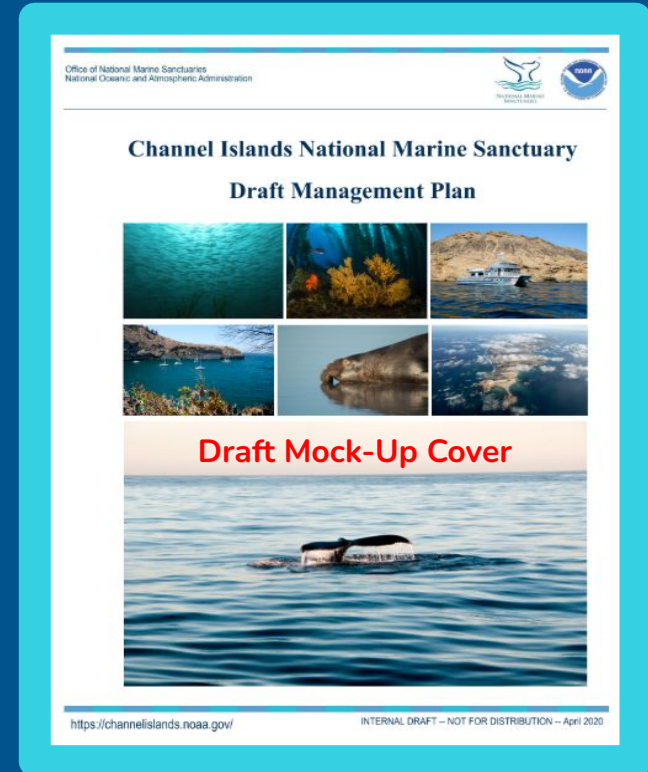
= step complete



Status of Management Plan Update Process

Recent activities:

- Firmed up our 10 action plan topics, assigned staff leads, formed internal teams
- Briefed regional and national leadership
- Preparing for upcoming writing workshop to start developing the project's Draft Environmental Assessment



Draft Management Plan: Action Plan Topics Taking Shape - Issue-Based Plans

● Climate Change

- Vulnerability assessment
- Support ocean acidification studies & monitoring
- Assess impacts to deep sea corals
- Role of marine reserves
- Education & public engagement on ocean climate change/ocean acidification
- CINMS emissions inventory & reduction
 - including VSR ship emission reductions

● Vessel Traffic

- Whale ship strike / Vessel Speed Reduction
- Area To Be Avoided (ATBA) adjustment
- Remote sensing (Shore-based radar, AIS)

● Introduced Species

- Support research/tracking of habitat change from *Undaria pinnatifida* and other non-native species
- Education/outreach with harbors/boaters to reduce additional spread
- Support early detection and response within CINMS

● Marine Debris

- Understand macro and microplastic load/trend, with partners
- CINMS shoreline focus for cleanups and source assessment/quantification
- Collaborate with: fishermen on gear loss, non-profits on submerged debris
- Education & outreach strategies/partnerships

● Zone Management

- Support monitoring, enforcement, and joint CDFW/NOAA administration of Channel Islands MPA network
- Santa Barbara Channel MPA Collaborative
- CDFW MPA Decadal Review process
- Evaluate and respond to other zoning issues/proposals

Draft Management Plan: Action Plan Topics Taking Shape - Programmatic Plans

● Education & Outreach

- *Blue Economy (tourism, rec use, recreational fishing)*
- *Volunteer and outreach program*
- *Citizen science*
- *Visitor centers/partner facilities/signage*
- *Media and communication tools*
- *Curriculum and education product development*
- *Collaborating with education partners*
- *Regional & national initiatives*
- *<see also: issue-based action plans>*

● Research & Monitoring

- *Socioeconomic: human use assessment*
- *Sanctuary condition tracking & reporting*
- *Ocean noise monitoring*
- *Coordination of priority field studies*
- *Habitat mapping characterization of sanctuary features*
- *Research interpretation & information sharing*
- *Regional & national sanctuary system initiatives*
- *<see also: issue-based action plans>*

● Resource Protection

- *Emergency response (spills, groundings, entanglements)*
- *Enforcement*
- *Technology development*
- *White abalone*
- *Permitting*
- *Emerging issues*
- *<see also: issue-based action plans>*

● Maritime Heritage

- *Shipwreck exploration, monitoring, interpretation*
- *Chumash community partnership*

● Administration & Operations

- *Vessel Operations Program and other field operations*
- *Administrative & facility priorities and initiatives*
- *Sanctuary Advisory Council*
- *<see also: Climate Change action plan>*

Sanctuary Signs and Visitor Centers

Sanctuary Advisory Council Briefing & Input Request
January 22, 2021





Using “Slido” *(for advisory council members)*

Using “Slido” *(for advisory council members)*



Head to “www.slido.com” (best way!)

or



Scan QR code using camera on phone

or



Wait for Claire or June to put question link in chat

Join at
slido.com
#9462



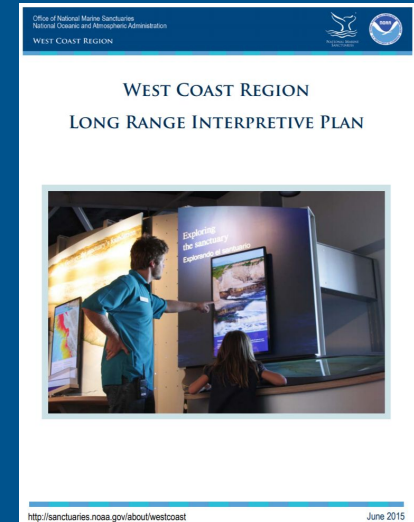
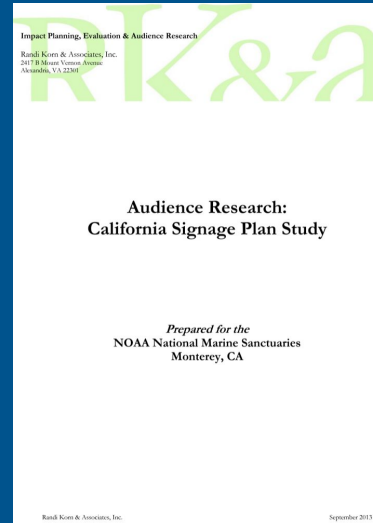
Sanctuary Interpretive Signs - Goal



Increase awareness of the Channel Islands, highlight resources that make it special, promote commercial and recreational activities, and promote regulations in place to ensure the Channel Islands thrive into the future.

Sanctuary Interpretive Signs - Background

- Current signs installed go back as far as 17 years
- Strategic assessments
- Funding Challenges & Opportunities
 - Oil spill settlement funds

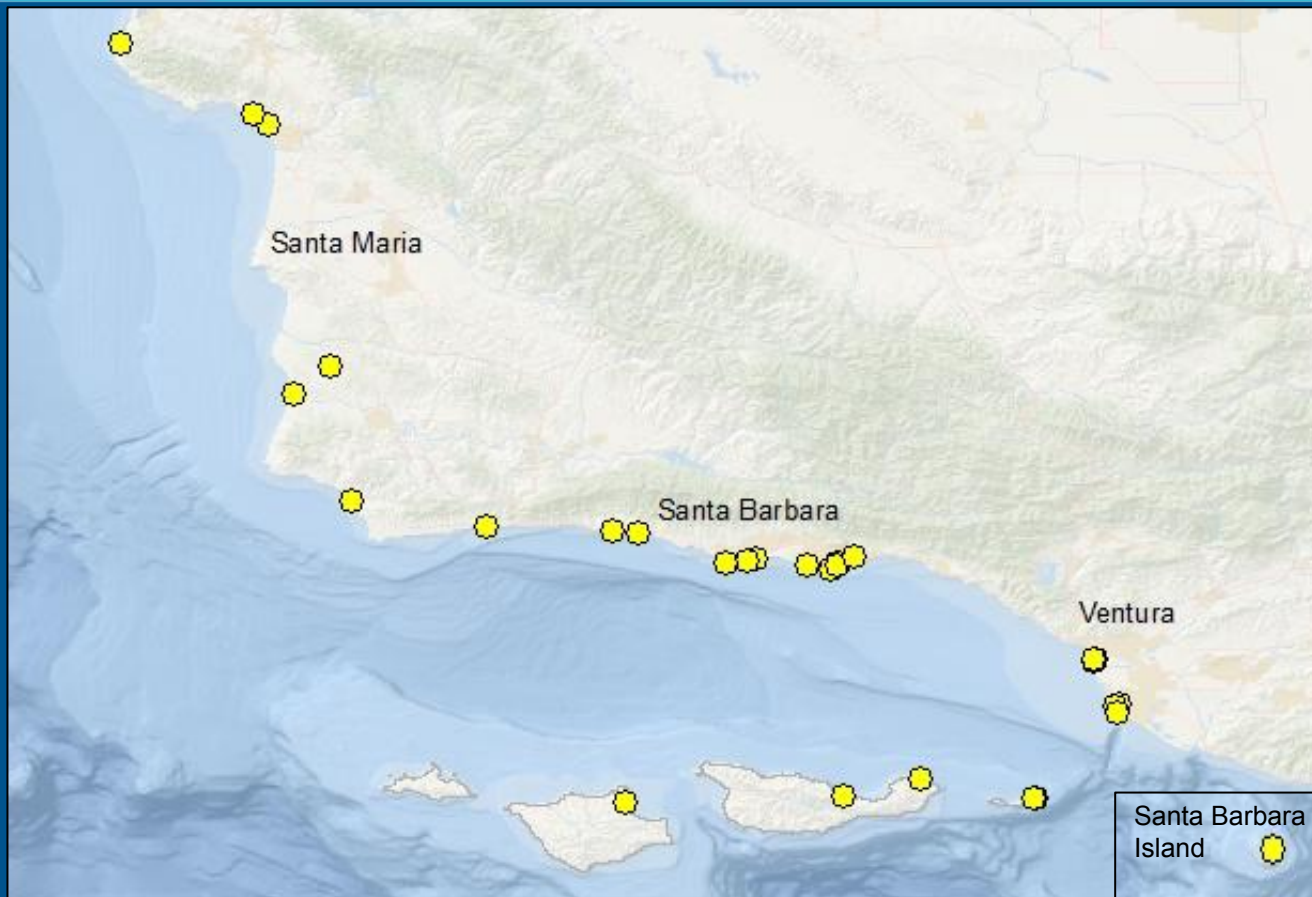


Interpretive Signs - Many Partners!

| Area | Number of Signs | Sign Locations |
|---------------------|-----------------|---|
| National Parks | 7 | Channel Islands National Park |
| State Parks | 3 | Carpinteria State Beach, El Capitan State Beach*, Refugio State Beach, Montana del Oro State Park |
| City/County Parks | 9 | Santa Barbara County Regional Parks, City of Goleta, City of Pismo Beach, City of Lompoc, Goleta Pier, Port Hueneme Pier |
| Harbors/Marinas | 11 | Santa Barbara Harbor, Ventura Harbor, Channel Islands Harbor |
| Other Jurisdictions | 10 | Vandenberg AFB, University of California Santa Barbara, UC Reserve at Coal Oil Point, Santa Barbara Zoo, Beachcomber Inn, Shell Beach, Hollister Ranch Shoreline Preserve |

Table 2: CINMS Sign Distribution by Jurisdictional Location. (*) Sign was removed from El Capitan State Beach and is currently being refabricated.

Interpretive Signs - Locations



Types of Signs: Sanctuary Orientation



Channel Islands National Marine Sanctuary & National Park

Working Together to Protect the Channel Islands

Channel Islands National Marine Sanctuary and Channel Islands National Park include the ocean environment and five of the eight California Channel Islands. The mixing of warm and cold ocean currents in this region supports a rich and diverse community of marine life, including thriving populations of fishes and invertebrates, large forests of giant kelp, and abundant populations of whales, dolphins, seals, sea lions, and seabirds. The sanctuary protects about 1,500 square miles (1,100 square nautical miles) of ocean habitat, stretching six nautical miles around the islands. The park consists of 250,000 acres of land and ocean environment out to one mile. Together, the park and sanctuary protect a wealth of species, habitats, cultural resources and maritime heritage artifacts. They also increase awareness through public education, research and monitoring.

The sanctuary and park offer various opportunities to explore and discover, while protecting the natural and cultural resources that make the Channel Islands unique.

NOAA's National Marine Sanctuaries manage 14 special marine areas that encompass more than 150,000 square miles of America's ocean and Great Lakes natural and cultural resources.

Sea stars are commonly seen in the rocky reefs of the Channel Islands.

California sea lions are graceful, acrobatic swimmers commonly seen in Channel Islands waters.

The most diverse and largest rookeries of seals and sea lions in the world rely on the isolation, protection and rich food resources of the Channel Islands.

Blue-ring top snails feed on bryozoans, copepods and kelp.

One third of the world's species of dolphins and whales rely upon the abundant waters of the sanctuary and park.

Boating is an enjoyable way to experience the Channel Islands.



Channel Islands National Marine Sanctuary

Your National Marine Sanctuary

In 1980, the ocean wilderness surrounding Santa Barbara, Anacapa, Santa Cruz, Santa Rosa, and San Miguel Islands was given special protected status with the designation of the Channel Islands National Marine Sanctuary. Extending 6 nautical miles around each island and encompassing 1,110 square nautical miles (approximately 1,470 square miles), the sanctuary protects important species, habitats, and maritime heritage resources, while balancing compatible commercial and recreational activities. Marine protected areas provide refuge for vulnerable species and habitats. Through research, education, conservation, and stewardship, the sanctuary enhances public awareness about the value of taking care of our ocean today and for future generations.

The nutrient rich waters of the sanctuary support both year round and seasonal fisheries.

California spiny lobsters are one of the many species that receive additional protection in marine reserves, a type of marine protected area within the sanctuary.

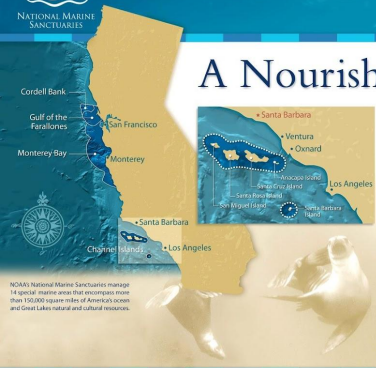
The Channel Islands are one of the top dive destinations in the world and rich island kelp forests provide homes for more than 1,000 species of marine life.

One third of the world's species of dolphins and whales rely upon the abundant waters of the sanctuary.

The bright orange garibaldi, one of the many species of fish found in the sanctuary, is the California State Marine Fish.

Types of Signs: Channel Islands Marine Life and Habitats

Channel Islands National Marine Sanctuary & National Park



NMMA National Marine Sanctuaries manage 11 special marine areas that encompass more than 100,000 square miles of America's oceans and Great Lakes natural and cultural resources.

A Nourishing Environment

The waters surrounding the Channel Islands provide a natural habitat for an incomparably rich and diverse community of marine life. The mixing of cold waters from the North Pacific with warmer currents from Baja California results in flourishing populations of fishes and invertebrates, large forests of giant kelp, and abundant populations of whales, dolphins, seals, sea lions and seabirds. These pristine waters are susceptible to human impacts of pollution, over-harvesting, and changing environmental conditions. What can you do to help ensure that this special ocean environment remains healthy?



The most diverse and largest rookeries of seals and sea lions in the world rely on the isolation, protection and rich food resources of the Channel Islands.

The Channel Islands harbor almost half of the world's population of a small nocturnal species of seabird called *Kauai's murrelets*.



One-third (or 28) of the world's species of dolphins and whales rely upon the abundant waters of the sanctuary and park.



12 species of seabirds breed on the Channel Islands and more than 60 species feed in the park and sanctuary.



Like forests on land, kelp forests provide living space for thousands of species of marine life.

Channel Islands waters are home to 25 species of sharks. Some shark species such as the blue shark are year round residents; while others migrate seasonally through sanctuary waters.



Like forests on land, kelp forests provide living space for thousands of species of marine life.

Un Ambiente Productivo

Las aguas que rodean las islas Channel Islands proveen un hábitat natural para una comunidad de vida marina incomparablemente rica y diversa. La mezcla de aguas frías del Pacífico norte con las corrientes más cálidas de Baja California resulta en prosperas poblaciones de peces e invertebrados, bosques de macro algas, ballenas, delfines, lobos marinos, focas y aves marinas. Estas aguas prístinas son susceptibles a los impactos humanos de contaminación, sobreexplotación y cambios en las condiciones ambientales. ¿Que puede hacer UD, para asegurar que este ambiente oceánico permanezca saludable?

Leyendas de las fotografías

Tiburones
Las islas Channel Islands son el hogar de 25 especies de tiburones. Algunos especies como el tiburón azul son residentes todo el año, mientras otros migran por temporadas.

Los Bosques de Macro-Algas
Las más diversas colonias de focas y lobos marinos del mundo dependen del aislamiento, protección y rico alimento disponible en las islas Channel Islands.

Lobos Marinos
Las más diversas colonias de focas y lobos marinos del mundo dependen del aislamiento, protección y rico alimento disponible en las islas Channel Islands.

Del Pato Nocturno
Las islas Channel Islands albergan a casi la mitad de la población mundial de una pequeña especie de ave marina nocturna llamada en inglés *Kauai's murrelet* (Pato nocturno en Español).

Ballenas y Delfines
Un tercio de las especies de ballenas y delfines del mundo (28 especies) dependen de las aguas del santuario y el parque.

Aves Marinas
12 especies de aves marinas se reproducen en las islas Channel Islands y más de 60 especies se alimentan en el parque y el santuario.

Channel Islands National Marine Sanctuary

Giant Forests in the Sea

Tied like a terrestrial forest with a canopy, kelp forests provide food, shelter and a place to attach for over 1,000 species of marine life. The giant brown kelp forms underwater forests that create one of the world's richest and diverse marine ecosystems. Kelp is one of the fastest growing types of marine algae in the world and can grow up to two feet per day under optimal conditions, reaching lengths of over 100 feet (30 meters). A substance called algin, found in the cell walls of kelp, helps to make it flexible—so that it can move with the waves and not break during large storms. When it is processed, the algin can be used to thicken and stabilize products such as paint, toothpaste, cosmetics, beer and even ice cream.

Who lives in the Kelp Forest?
The kelp forest supports a wide variety of species from tiny shrimp that swim among the kelp blades to gigantic gray whales that may stop to rest or feed in kelp beds during their long migration.

Harbor seals may feed on small fish like sand lance but prefer to eat squid and octopus in the shelter of kelp.

Northbound are one of the most colorful and diverse of the kelp forest's residents.

California sheephead fish are commonly seen in kelp forests. They are voracious eaters and are usually caught in traps for sea urchins.

Channel Islands National Marine Sanctuary

Gray Whale

(Eschrichtius robustus)

Gray whales make an annual migration along the west coast of North America. Southbound animals typically migrate offshore among the Channel Islands, and can be observed between December and February. Northbound animals are often observed close to the mainland and can be seen from the shore February through May.

Whaling took a heavy toll on this species, reducing the Pacific population to fewer than 1,000 animals by the early 1900s. Gray whales have been protected since 1946 and the California population has made a remarkable recovery. They have been removed from the endangered species list and have an estimated population of more than 20,000 animals.

Adult length: 28-30 tons (25-34 metric tons)
Adult length: 10-16 (10-12 meters)
Group size: often 1-5
Male animals feeding between whale racks and fluke strike this animal from the right.

Humpback Whale (The humpback whale humpback whale) One of the most amazing of the large whales.

knuckle on head or lower jaw
Long white or black flippers

Migration Route
Southern Resident orca
Whale migration around the Channel Islands
Whale migration around the Channel Islands

Behavior to watch for:
Spighopping, Breaching, Scrambling, Breasting

Most of the world population of Gray Whales passes through the Santa Barbara Channel in winter and spring during the 1,000-1,500 mile (1,600-2,400 km) annual northward migration.

Types of Signs: Ocean Etiquette



Photo: iStock



W A R N I N G
ALL SEABIRDS ARE PROTECTED BY LAW



A V I S O
TODOS LAS AVES MARINAS ESTÁN PROTEGIDAS POR LEYES

Anyone harming a pelican, gull, or other seabird can be prosecuted.

- > Never feed seabirds.
- > Never attempt to pet wild seabirds.
- > Don't dangle bait or hooked fish.
- > Don't discard monofilament line; recycle it or dispose of it in appropriate containers.

Toda persona que dañe a un pelicano, gaviota o otra ave marina, será procesada legalmente.

- > Nunca alimente a las aves marinas.
- > Nunca intente tocar a las aves silvestres.
- > No deje colgando la carnada o los pescados.
- > No desheche los sedales de monofilamento; recíclelos o descártelos en los recipientes apropiados.

HOTLINES/LÍNEAS DIRECTA

Report an injured or entangled Seabird to:
Notifique para un ave lesionada o atrapada:

- > 805-564-5530 Harbor Patrol
- > 805-966-9005 Wildlife Care Network

Report violations of state or federal law to:
Denuncie las infracciones de leyes estatales o federales:

- > 888-334-2258 CalTIP

Seabirds are protected by the California State Seabird Conservation Act and the Federal Migratory Bird Treaty Act.



Explore Tidepools With Care

Tenga cuidado al explorar

The rocky reefs that are exposed at low tide support a rich and diverse array of sea life. The plants and animals that call tidepools home are unique in that they can thrive under harsh conditions. Constantly changing water level, crashing surf and exposure to drying sunlight and air are a few of the challenges that sea life must meet in order to survive here.

Tidepool Neighbors



Red and purple sea anemones. Surfgrass. Giant kelp hat limpet. Sea bladders.



Black Abalone

Melano caudo!

Abalones are a type of marine snail. Once abundant throughout California, populations crashed in the 1980s and 1990s due to changes in ocean climate, human impacts and disease. The road to recovery depends on safeguarding the abalone's habitat such as these tidepools. Black Abalones are now protected as a Federally Endangered Species. You can help them survive by adopting some of the tips on this sign.



Step carefully *Pise con cuidado*
Avoid crushing the animals and plants.

Watch quietly *Observe en silencio*
Look closely – you will see more.

Be gentle *Sea gentil en su contacto con animales y plantas*
Touch lightly so you don't disturb seashore life.

Leave them *Deje los animales y plantas donde los encontró*
Leave the animals, plants, rocks and shells where you find them.

Scan for more information and link to free tidepool app.



Watching Wildlife

The waters around the Channel Islands offer year-round wildlife viewing opportunities. Many visitors travel to Santa Barbara and Ventura Counties and the Channel Islands to observe marine mammals and seabirds in their natural environments. One third of the world's species of dolphins and whales rely upon the nutrient-rich waters of the sanctuary. Sixty species of seabirds, nest feed, and migrate here, including the Sooty Shearwater (left) and the California Brown Pelican (below).



When boating, please observe the marine mammal viewing code of conduct by minimizing jet wake. We request that marine mammals, if approached by or adults, not the calves in contact with others, be allowed to swim. Speed movement should be from the rear of a whale. Federal law prohibits pursuit of marine mammals.



Twenty seven species of whales and dolphins visit seasonally to reproduce in sanctuary waters, including one of the most highly concentrated areas of whales.



Sooted health's cloaks linked to ocean health. Seabirds, waders, or gulls carrying droppings supports predators, the base of the marine food web.



Common dolphins, humpback, orcas, and Fraser dolphins also frequent the region. Spot pods of common dolphins, 1000 miles and time from the nearest landmass.



Five species of pinnipeds, including California sea lions, elephant seals, and fur seals also breed along the Channel Islands for feeding and resting.

Watchable Wildlife Guidelines:

- Keep your distance
- Do not touch any animal even if it appears to be sick, injured or orphaned
- Never feed wild animals
- Do not use food, calls, whistles, decoys or other artificial means to attract wildlife
- Leave pets at home - they may startle, chase and even kill wildlife, and can introduce disease/parasites to island species
- Never get between wildlife and a seaward escape route
- Take only memories and photographs, and leave only bubbles and footprints

Types of Signs: Blue Economy



Channel Islands National Marine Sanctuary

Commercial Fishing



The productive marine environment within the Channel Islands National Marine Sanctuary supports economically important commercial fisheries including market squid, sea urchin, spiny lobster, and California halibut. Fishing activity occurs in the near shore giant kelp beds and rocky reefs and in the deep offshore basins. Fishermen work off many different types of vessels using nets, traps, long-lines, rod and reel and dive equipment. There are hundreds of fishermen and fishing vessels annually working within sanctuary waters and supporting local economies.



Both in value and volume market squid (*Loligo opalescens*) is one of California's largest commercial fisheries. It is sold as calamari in local restaurants, sold overseas, and used as bait.



Red urchins (*Strongylocentrotus franciscanus*) thrive in the kelp forest habitats of the Channel Islands. The eggs, which are marketed in jars, a prezed item in sushi bars locally and overseas.



California halibut (*Paralichthys californicus*) is a top level predator preyed by both commercial and recreational fishermen for its strong light, size and delicate white, fatty meat.



The rocky reefs in the Channel Islands region support commercial and recreational fishing grounds for California spiny lobster (*Paralichthys interpres*).



Channel Islands National Marine Sanctuary

Explore the Channel Islands



Towering kelp forests, sea caves, and coves offer some of the best diving in the world.



The Channel Islands offer wonderful kayaking and boating opportunities to explore island sea caves and enjoy breathtaking views of scenic coastline.



The waters around the Channel Islands offer year round wildlife viewing opportunities.



The nutrient rich waters of the sanctuary support both year round and seasonal fisheries.



The Channel Islands are a popular destination to observe annual whale and seabird migrations, spectacular wildflowers, and beautiful scenery. The Channel Islands National Marine Sanctuary and National Park encourage responsible visitor use when boating, diving, snorkeling, fishing, hiking, camping, swimming, kayaking, and wildlife viewing. Be aware that the weather in the Channel Islands is in a continuous state of change. Monitor VHF Weather Channel 3 (WX 3) VHF-FM 162.475 MHz for marine forecasts. For current weather conditions, visit the website [kiosk at Channel Islands Boating Center](http://kiosk.ca-channelislands.noaa.gov) or visit channelislands.noaa.gov or www.nvrla.noaa.gov

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Visitor Center Partnerships



Cabrillo High School Aquarium
Lompoc



Channel Islands National Park
Visitor Center
Ventura Harbor



Outdoors Santa Barbara
Visitor Center - Santa
Barbara Harbor



COAST - UCSB Campus



Santa Barbara Maritime Museum
Santa Barbara Harbor



Aquarium of the Pacific
Long Beach



Channel Islands Boating Center
Channel Islands Harbor



Santa Barbara Museum of Natural History
Sea Center - Santa Barbara Stearns Wharf

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For More Information

Mike Murray

Deputy Superintendent for Programs
michael.murray@noaa.gov

Julie Bursek

Team Lead Education and Outreach
julie.bursek@noaa.gov

June Shrestha

2021 CA Sea Grant Fellow
june.shrestha@noaa.gov

Claire Nasr

2020 CA Sea Grant Fellow
claire.nasr@noaa.gov



[https://channelislands.noaa.gov/
manage/plan/revision.html](https://channelislands.noaa.gov/manage/plan/revision.html)

Interpretive Signs - Background

2004

12 bilingual signs

Funding: American Trader Restoration Plan

Focus: seabird protection, minimize impacts from shore-based fishing activity

2005-2009

26 signs

Funding: ONMS California Signage Plan

Focus: sanctuary orientation, MPAs

Interpretive Signs - Background, continued

- 2012-2014:
 - 12 bilingual signs
 - Funding: Torch Oil Spill Trustee Council, Santa Barbara County CREF Grant
 - Focus: Exploring tidepools with care, black abalone
- 2013: Visitor survey of California sanctuary signs
- 2015: Long Range Interpretive Plan for West Coast NMS
- 2019 & 2020: Requested but did not receive ONMS funding for sign replacements (awaiting 2021 request results)
- 2020: Signage inventory update and status report