



Point Blue  
Conservation  
Science

# Opportunities to Improve Ocean Conservation

## A Briefing

June 2020

## **About this Brief**

This brief summarizes the findings of a longer report,  
**“Assessment of Marine Protected Areas in the  
California Current.”**

The report was completed on June 5, 2020 by Nathan Elliott, Sam Veloz, Meredith L. Elliott, and Jaime Jahncke of Point Blue Conservation Science.

To read the full report, please visit:  
[www.pointblue.org/mpa-assessment](http://www.pointblue.org/mpa-assessment)

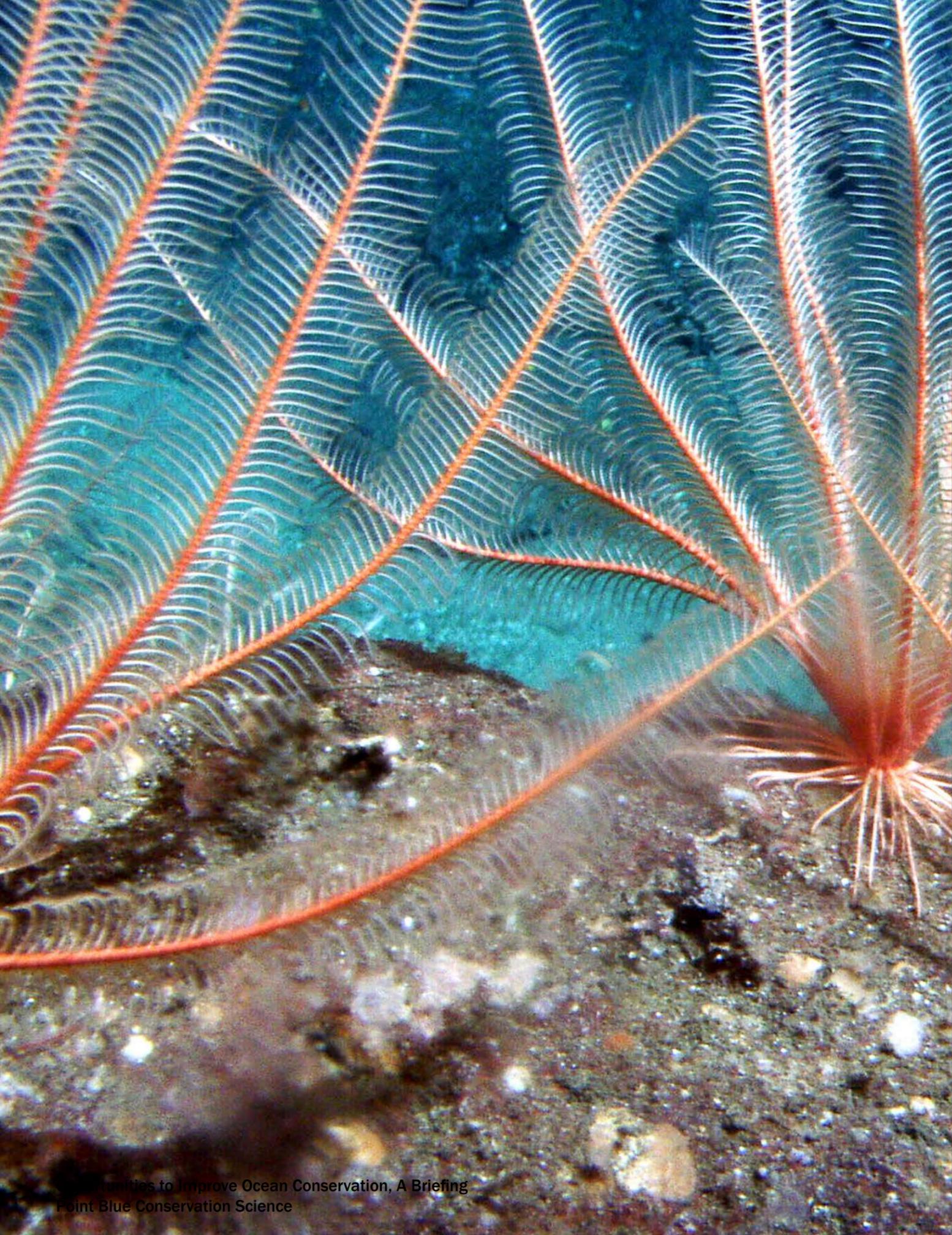
### Suggested Citation

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### Photo captions/credits

Front cover: Strawberry corallimorpharian and orange hydroid/Joe Hoyt, NOAA Cordell Bank. Inside: Crinoids in Cordell Bank National Marine Sanctuary/ Michael Carver, NOAA. Cassin’s auklet chick/Point Blue, USFWS. Humpback whales feeding/Sophie Webb. Kelp forest/Camille Pagniello, CA Sea Grant. Cordell Bank Reef Crest SCUBA diver/Joe Hoyt, NOAA. Intertidal habitat with anemone/Maps for Good, Point Blue, USFWS. Back cover: Blue Whale, Cordell Banks Marine Sanctuary, Sonoma Co/Mark Rauzon.

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## Introduction

The California Current System is one of the most productive marine environments in the world. It extends from Vancouver to Baja California, and like other eastern boundary currents, it hosts biologically important species, supports important economic activities, and is adjacent to increasing human populations.

To mitigate impacts of fishing, shipping, and other economic activities and to protect marine biodiversity, ecosystem services and cultural values, about 390 marine managed or protected areas (herein Marine Protected Areas or MPAs) have been established throughout the California Current System.

In an effort to better understand and enhance how MPAs are working to protect marine biodiversity, we performed an assessment and compiled a report that shares:

- How key habitats and species are being protected
- Major threats impacting existing protected areas
- Current MPA management & regulations
- Opportunities for improving conservation

In this brief, we provide highlights of the original report.

Please find the full report at:

[www.pointblue.org/mpa-assessment](http://www.pointblue.org/mpa-assessment)

# How Are We Doing?

Because of the way that the California Current is currently being managed, some species are getting too little protection, while others are well represented or even successfully protected relative to their conservation need. Our assessment evaluated where new MPAs and/or where changes in regulations could have the greatest conservation impact.

## Federal vs. State

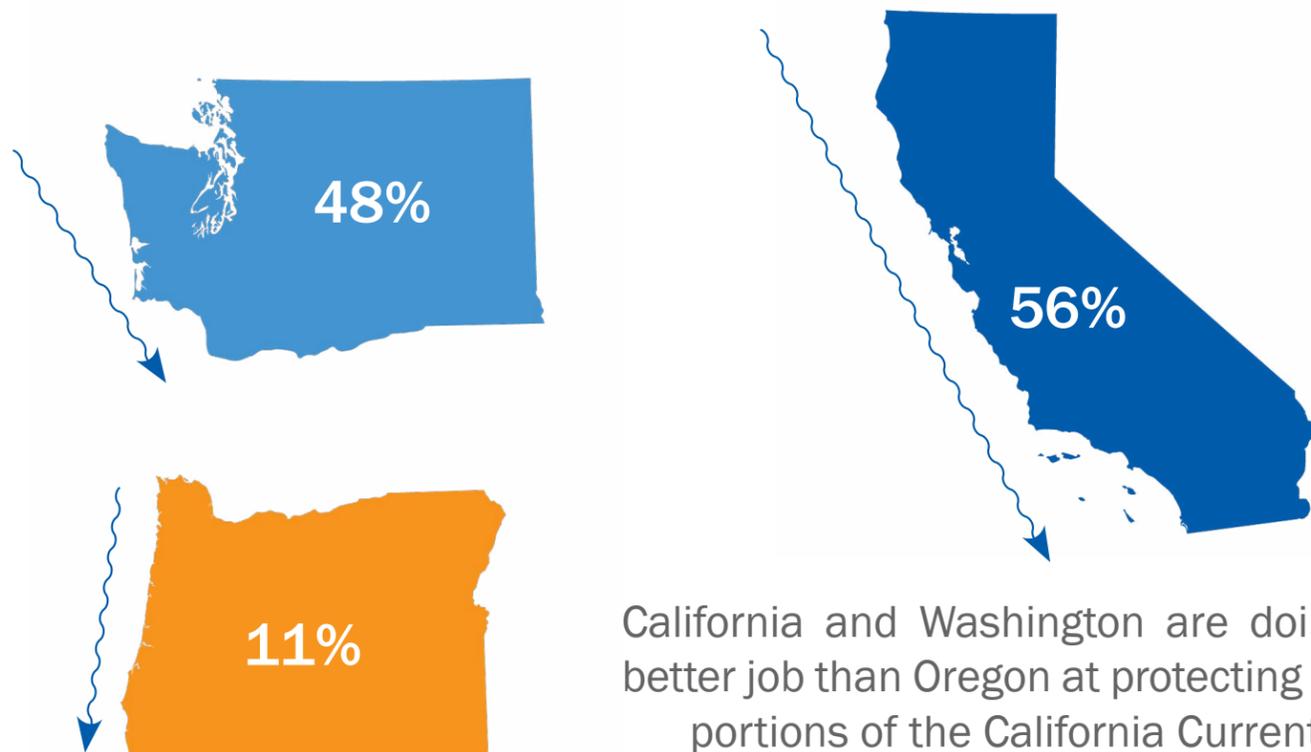


Although Federal MPAs cover more area, States (WA, OR, and CA) are doing a better job of protecting ocean biodiversity than the Federal level.

## Species Protection



## State vs. State: Percent of State Waters Protected



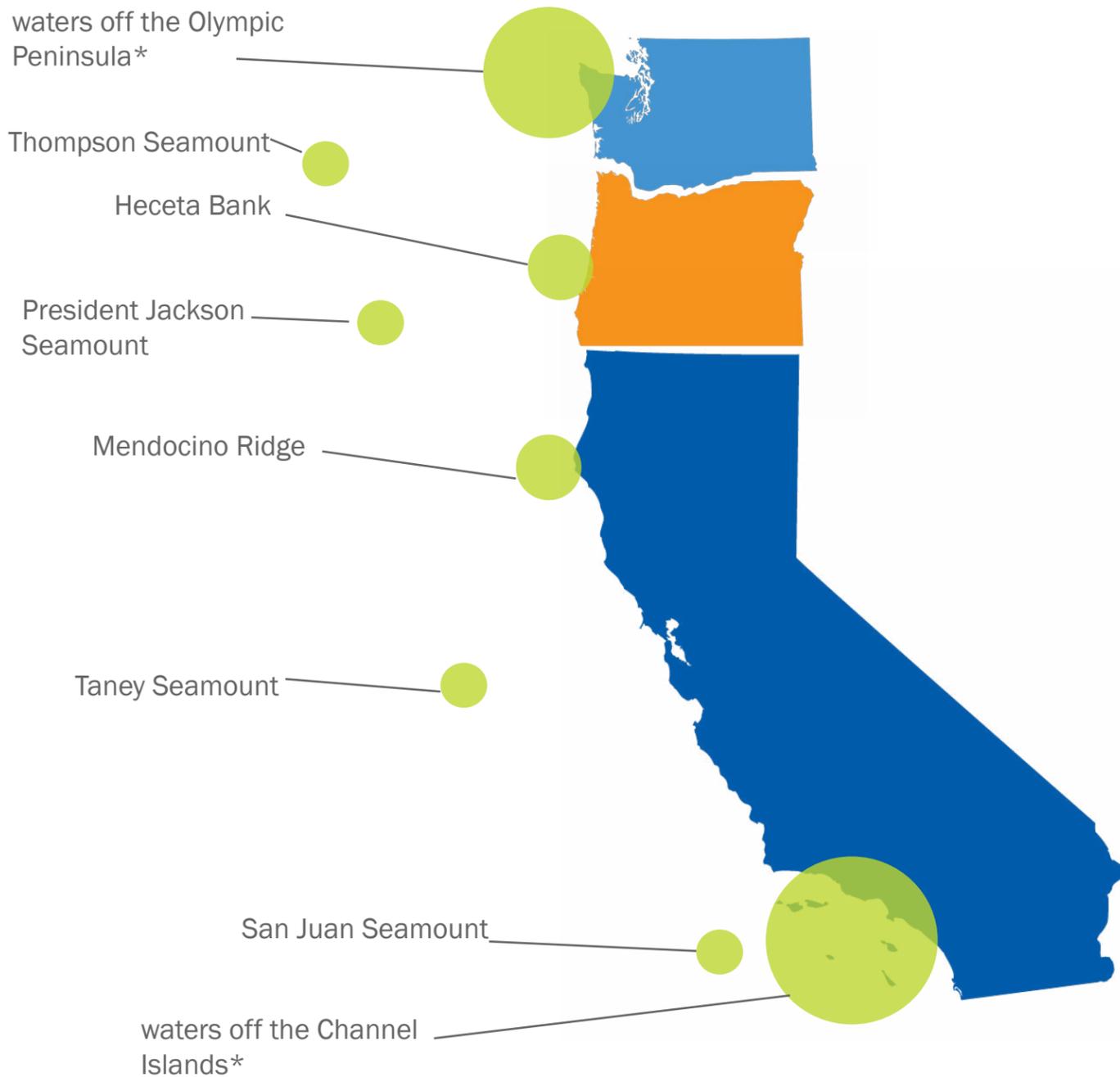
California and Washington are doing a better job than Oregon at protecting their portions of the California Current.

# Opportunities for Better Conservation

## Best Places for New MPAs

**30% by 2030**

The IUCN recently called for 30% of the world's oceans to be protected by 2030. To see what this might look like in the California Current, we focused in on the top 30% of habitat as ranked by two Zonation analyses: one that prioritized rarity and one that prioritized biodiversity. The graphic displays the areas that overlapped.

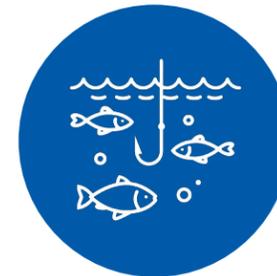


\*recommend expansion of existing MPA

## Best Places to Strengthen Regulation

**Reducing Human Impact is Key**

Strengthening regulation in existing California Current MPAs would offer significant conservation benefits and is potentially more feasible than establishing new MPAs. Existing regulations cover 52% of the California Current, offering opportunities to increase protection in already regulated areas. Our analysis identified 30 MPAs that could increase conservation value by implementing regulations that reduce human impacts.



**Fishing**

Recreational fishing is an area that needs additional regulation within all MPAs. It is a human activity that has great magnitude in terms of impact. Additionally, it would benefit species to strengthen commercial fishing regulations within National Marine Sanctuaries.



**Shipping**

Shipping is another impact of concern, with a high index of impact, yet few restrictions. Within National Marine Sanctuaries, redesigning shipping lanes and/or restricting dumping (especially from cruise ships, which have exemptions under many NMS regulations) would be helpful.



**Nearshore Habitat**

Expanding the nearshore area protected by MPAs would provide the greatest conservation value for the least area protected. Increasing environmental protection of areas in and adjacent to existing nearshore MPAs would offer significant conservation benefits.



**Seamounts**

Reducing human disturbance by strengthening the protection of seamounts—off-shore underwater mountains that harbor high biodiversity—in the California Current would have significant conservation benefits relative to the total area protected.

“We feel the beauty of nature because we are part of nature and because we know that however much in our separate domains we abstract from the unity of Nature, this unity remains. Although we may deal with particulars, we return finally to the whole pattern woven out of these.”

-Ernest Everett Just (1883-1941), Professor in marine science, Howard University

## A Critical Moment to Seize

Of all the threats we examined, climate change is having the largest impacts on our oceans. MPAs in the California Current will be substantially impacted by climate change-related ocean acidification and increases in ultraviolet radiation and sea surface temperature. Due to the global scale of climate change, management entities that exist on local and regional scales like MPAs on their own are not likely to be effective solutions for climate impacts. But if they work together using analyses like ours, we see an opportunity to increase protections and practices that will help our oceans be resilient to change on larger scales.

For the species we examined, very little of the California Current is highly protected. A relatively low percentage of the suitable habitat is well protected. On average, only 2 – 3% of a species' total suitable habitat was in MPAs with moderate or better protection.

Along with the opportunities outlined on the previous pages, clarifying MPA boundaries and simplifying marine governance structure would make it easier for individuals to comply with marine regulations and easier for governments to enforce them.

We should be proud of the protections we've enacted within the California Current, and if we are to help our oceans survive and thrive in a rapidly changing world, we must build on what we've done with sound science as a guide. It will be to the benefit of wildlife and people, as we are all part of and dependent on our ocean ecosystem.

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