



Photo: Matt McIntosh/NOAA

## Navigating the Future

**Charting the future management and direction of Olympic Coast National Marine Sanctuary  
A look at our work, accomplishments, and current challenges**

National marine sanctuaries seek to preserve the extraordinary scenic beauty, biodiversity, historical connections, and economic productivity of our most precious underwater treasures.

### Olympic Coast National Marine Sanctuary mission:

*To protect the Olympic Coast's natural and cultural resources through responsible stewardship, to conduct and apply research to preserve the area's ecological integrity and maritime heritage, and to promote understanding through public outreach and education.*



Photo: NOAA

### STEWARDSHIP

Stewardship involves managing and fostering the responsible use and protection of sanctuary resources through conservation and sustainable practices to enhance ecosystem resilience and human well-being.



Photo: Jenny Waddell/NOAA

### RESEARCH

Scientific research conducted in the sanctuary involves a variety of activities, such as seafloor mapping, marine wildlife and habitat surveys, oceanographic monitoring, deep-sea exploration, and understanding human connections and services.



Photo: NOAA

### EDUCATION

Education and outreach programs include place-based activities for regional students and community members, career-building opportunities for rising professionals, and high-quality sustainable experiences for visitors.

## TRIBAL TREATY RIGHTS

The sanctuary lies within the usual and accustomed treaty fishing, hunting, and gathering areas of the Hoh Tribe, the Makah Tribe, the Quileute Tribe, and the Quinault Indian Nation. These Coastal Treaty Tribes are the co-managers, with the state of Washington and the U.S. government, of fishery and related marine resources off the Olympic Coast. The four Coastal Treaty Tribes are independent sovereign nations, with the inherent right to self-governance and decision making on issues that affect their own people, lands, and resources. The 1855 Treaty of Neah Bay with the Makah Indian Tribe and the 1856 Treaty of Olympia with the Hoh Indian Tribe, Quileute Indian Tribe, and Quinault Indian Nation reserved the rights of those tribes to continue to fish, hunt, and gather resources off reservation. These rights were not given to the tribes, but rather reserved by the tribes unto themselves. Under the U.S. Constitution, treaties are considered “the supreme law of the land.” The treaties continue to govern the relationships between the federal government and individual tribal governments today. The sanctuary supports the exercise of tribal treaty rights, subject to the requirements of other applicable law, and works with each of the Coastal Treaty Tribes to collaborate on areas of mutual interest and in the fulfillment of our trust responsibility.



Photo: Robert Steelquist/NOAA

*“The Office of National Marine Sanctuaries places a high value on partnerships. Our partners often have complementary roles that build a much more cohesive approach to marine resource management. Our success is based on partnerships with the Coastal Treaty Tribes; local, state and federal agencies; and sanctuary communities.”*

*- Superintendent Kevin Grant*

NOAA’s Office of National Marine Sanctuaries has tremendous responsibilities caring for the Olympic Coast, but that task is not one that we shoulder alone. Hosts of other agencies, Tribes, and organizations have complementary roles in marine protection and assist us with managing the sanctuary.

## **INTERGOVERNMENTAL POLICY COUNCIL**

The Coastal Treaty Tribes have co-management responsibilities with Washington state for fishery resources and fishing activities within the sanctuary. These common interests and joint authorities led the Hoh, Makah, and Quileute tribes, the Quinault Indian Nation, the state of Washington, and NOAA’s Office of National Marine Sanctuaries to create the Olympic Coast Intergovernmental Policy Council in 2007. The first of its kind in the nation, the Intergovernmental Policy Council provides a regional forum for resource managers to exchange information, coordinate policies, and develop recommendations for resource management within the sanctuary.

## **ADVISORY COUNCIL**

Olympic Coast National Marine Sanctuary Advisory Council was established in 1999, as a community-based body, to provide advice on the management and protection of the sanctuary. The advisory council, through its members, serves as a liaison to the community regarding sanctuary issues and represents community interests, concerns, and management needs to the sanctuary. The council is composed of representatives of Coastal Treaty Tribes, state and local governments, other federal agencies, maritime industry, fishing, education, tourism, conservation organizations, and the community at large.



Photo: NOAA

The Intergovernmental Policy Council provides a forum for the tribal, state and federal governments to coordinate activities within the sanctuary.



Photo: NOAA

The Sanctuary Advisory Council brings together diverse community interests to strengthen and support management of the sanctuary.



Photo: NOAA

Since its inception, the Intergovernmental Policy Council has laid the groundwork for successful government-to-government collaboration.

# SETTING THE COURSE: ACCOMPLISHMENTS

## Oil Spill Prevention

There have been no major oil spills since the sanctuary was designated in 1994. However, the risk of a large oil spill is widely seen as one of the greatest threats to the Olympic Coast. An Area to be Avoided was established by the International Maritime Organization as a voluntary measure that directs large vessels to stay offshore of the rugged Olympic Coast's sensitive and dangerous environment to avoid incidents. The sanctuary regularly monitors compliance and conducts outreach to mariners.

## Tribal Engagement

The sanctuary conducts regular coordination, collaboration, and consultation with each of the Coastal Treaty Tribes on sanctuary policies and programming, including resource protection measures, research activities, and educational programming. Additionally, sanctuary staff have collaborated with the Intergovernmental Policy Council, as well as other forums, to promote ideas on appropriate and meaningful mechanisms for engagement between sanctuaries and tribal and Indigenous communities.

## Enhancing Ocean Literacy

The sanctuary has provided thousands of students, teachers, and community members with experiential education programs focused on the science and stewardship of the Olympic Coast. These programs are key to improving ocean literacy and fostering a lifelong respect for and understanding of the Olympic Coast and ocean ecosystems, while also providing career-building opportunities.

## Providing 20+ Years of Oceanographic Monitoring

The sanctuary's mooring program has generated long-term data on changing ocean conditions, such as harmful algal blooms, upwelling, water chemistry, and low oxygen events. Data from these monitoring efforts are applied by partners to support a variety of efforts ranging from ocean acidification forecasting to harvest management by the Coastal Treaty Tribes.

## New Research Vessel

The new 52-foot research vessel (R/V) *Storm Petrel* provides a platform for a variety of research missions, including oceanographic data collection, climate change and ocean acidification monitoring, seafloor mapping, habitat characterization, and marine wildlife research. In addition, the R/V *Storm Petrel* can support a range of at-sea activities, such as derelict fishing gear recovery, dive operations, education programs, and maritime heritage missions.



Photo: NOAA

The sanctuary collaborates with other agencies and user groups to reduce the potential for oil spills and improve contingency planning for spill response.



Photo: Robert Steelquist/NOAA

The canoe culture, as celebrated in the annual "Tribal Canoe Journeys," is a transfer of knowledge and understanding of coastal culture to new generations.



Photo: NOAA

The sanctuary provides a natural classroom for students to learn about ocean science and stewardship.



Photo: Kathy Hough/NOAA

The new vessel helps the sanctuary provide science-based solutions that address evolving environmental pressures on our ocean and coasts.

## Designation of an Ocean Acidification Sentinel Site

In 2019, the sanctuary was designated as a sentinel site for ocean acidification to focus on related science and identify trends in carbonate chemistry and hypoxia through collaborative monitoring, research, and public engagement. The sentinel site will help ensure that the Olympic Coast is well prepared for changing ocean conditions, with research and information that supports management responses and actions.

## Condition Report Released

Olympic Coast National Marine Sanctuary's 2008–2019 Condition Report was released in 2022. This regional management tool uses a standardized method to summarize the condition and trends of the sanctuary's resources, habitats, and ecosystem services. This work enables the sanctuary to comprehensively document the factors that affect management responses to pressures on sanctuary resources.

## Promoting the Blue Economy

Healthy ocean areas are good for business—people travel from all over the world to visit national marine sanctuaries and enjoy activities such as hiking, wildlife viewing, paddling, diving, and fishing—and the money spent by visitors trickles throughout the local economy. The sanctuary works with regional tourism organizations and businesses to provide high quality visitor experiences, while also promoting sustainable use and responsible recreation and tourism.

## Advances in Seafloor Mapping

Using cutting-edge technologies, the sanctuary and partners have made significant advances in mapping and studying the seafloor, including deep-sea habitats. Scientists use this information to plan surveys, explore habitats, understand species distribution, and to locate submerged maritime heritage resources such as shipwrecks. These efforts are critical to inform cooperative initiatives related to ecosystem-based management, marine spatial planning, and integrated ecosystem assessments.

## Tracking and Reducing Marine Debris

The sanctuary is a founding member of Washington CoastSavers and continues to support biannual beach cleanups on the Olympic Coast to mitigate marine debris that are deposited daily on our shores. Following the 2011 Japan tsunami, the sanctuary and NOAA Marine Debris Program began working with volunteer citizen scientists to track marine debris accumulations along Olympic Coast. Using NOAA Marine Debris protocols, volunteers collected information on the types and quantities of tsunami related marine debris.



Photo: Jenny Waddell/NOAA

Sanctuary research and monitoring programs help inform management and conservation efforts in the region.



Photo: Matt McIntosh/NOAA

The Olympic Coast offers breathtaking scenery, invigorating outdoor recreation, the experience of solitude, and an opportunity to learn about nature and cultures.



Photo: NOAA

Using advanced technology, scientists are able to observe deep seafloor habitats featuring a diversity of species such as deep-sea corals, fish, and sponges.



Photo: Karlyn Langjhar/NOAA

More than a thousand volunteers participate each year in organized beach cleanups removing tons of debris from our coasts.

# NAVIGATING THE FUTURE: CURRENT CHALLENGES

## INCREASED HUMAN USES

Facilitating compatible and sustainable human uses of sanctuary resources is an important role of the sanctuary, and understanding how various human uses may impact sanctuary resources is not always clear. For example, while technologies such as unmanned aerial vehicles (UAVs) or drones can lead to better research and monitoring, and increased visitation expands awareness of the sanctuary, they may also cause inadvertent impacts to wildlife. Commercial development such as offshore renewable energy, aquaculture, fiber optic cables, and emergent technologies may provide broad benefits to the public, but may also impact sanctuary resources.

## CHANGING OCEAN CONDITIONS

Ocean conditions are already changing and are expected to undergo further significant changes by the end of the century due to increasing carbon emissions by human activities. Many of the projected changes have the potential to profoundly impact coastal and marine ecosystems on both local and global scales, threatening the physical, social, cultural, economic, and ecological well-being of communities that depend on them. On the Olympic Coast, ocean conditions continue to change and intensify in response to climate change, prompting concerns about impacts from events such as ocean acidification, marine heatwaves, harmful algal blooms, low oxygen events, and coastal storms.

## THREATS TO WATER QUALITY

The sanctuary strives to maintain and improve water quality. Although water quality within the sanctuary is currently good, the potential for contamination through vessel discharges (e.g., ballast water and treated or raw sewage) and by petroleum products, pathogens, and chemicals is a concern. There are also several contaminants of concern (e.g., microplastics) that enter marine waters through wastewater treatment plants, stormwater outfalls and runoff, industrial outfalls, and landfills.



Photo: NOAA

Plastics are the most common form of marine debris. They can come from a variety of land and ocean-based sources.



Photo: © Florian Graner

Storm intensity and wave height have increased over the past 50 years.



Photo: NOAA

Using specialized tools, sanctuary scientists collect data to monitor ocean conditions.

## IMPACTS TO WILDLIFE

Acoustic, physical, and visual disturbances caused by human activities can have physical and behavioral impacts on wildlife above, below, and on the water's surface. Wildlife responses to disturbance include flushing birds from their nesting roosts, flushing of marine mammals from haul out areas, or even death. Sources of wildlife disturbance in the sanctuary include low-flying aircraft, motorized personal watercraft, fireworks, close proximity to wildlife aggregation areas (by land, water, or air), and other human generated noises from activities such as shipping, military exercises, or seismic exploration.

## INTRODUCED SPECIES

Although relatively few non-indigenous species have been reported in sanctuary waters, introduced species can pose a threat to marine life and habitats. Introduced European green crabs are a particular emerging threat to Washington's lucrative shellfish industry by competing with native species and damaging habitat like eelgrass beds which serve as important nursery habitats for a variety of species like salmon and Dungeness crab.

## GET INVOLVED

Olympic Coast National Marine Sanctuary is a treasure we share—and protecting this special place now and in the future is a responsibility we all share as well.

Learn more about how you can get involved in navigating the future at [olympiccoast.noaa.gov](http://olympiccoast.noaa.gov).



Photo: © Florian Graner

Twenty-nine species of marine mammals reside in or migrate through the sanctuary.



Photo: NOAA

Sea stacks and islands provide critical habitat for common murrelets and tufted puffins.



Photo: NOAA

Rocky shores are abundant and provide habitat for creatures that can tolerate this dynamic and exposed environment.



NOAA's Office of National Marine Sanctuaries serves as the trustee for a network of underwater areas encompassing more than 620,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The network includes a system of 15 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.

### Location

From Cape Flattery to the mouth of the Copalis River, on Washington's outer coast

### Protected Area

3,188 square miles

### Designation

July 1994

### Habitats

Beaches  
Rocky shores  
Kelp forests  
Rocky reefs  
Sandy seafloor  
Open ocean  
Deep sea

### Key Species

Ochre sea star  
Dungeness crab  
Northern sea otter  
Tufted puffin  
Orca whale  
Deep-sea coral

## NATIONAL MARINE SANCTUARY SYSTEM



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### Office of National Marine Sanctuaries

Network of marine protected areas  
Encompasses more than 620,000 square miles  
Established October 1972

### On the Web

[sanctuaries.noaa.gov](http://sanctuaries.noaa.gov)  
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