

## OLYMPIC COAST NATIONAL MARINE SANCTUARY

### A Report for Sanctuary Advisory Council Members Reporting Period: May 8 – July 2, 2021

#### ABOUT THE SANCTUARY

Olympic Coast National Marine Sanctuary spans 3,188 square miles of marine waters off the rugged Olympic Peninsula coastline. The sanctuary extends 25 to 50 miles seaward, covering much of the continental shelf and several major submarine canyons.

The sanctuary protects a productive upwelling zone home to numerous marine mammal and seabird species, diverse populations of kelp and intertidal algae, and thriving invertebrate communities. The sanctuary is also rich in cultural resources, with over 200 documented historical shipwrecks and the vibrant contemporary cultures of the Makah, Quileute, and Hoh Indian Tribes and the Quinault Indian Nation.

#### OLYMPIC COAST NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

Organized by Olympic Coast National Marine Sanctuary (OCNMS) management priorities

##### Table of Contents

Treaty Trust Responsibilities .....	1
Collaborative and Coordinated Management .....	1
Conduct Collaborative Research, Assessments, and Monitoring to Inform Ecosystem-Based Management .....	2
Improve Ocean Literacy .....	3
Sanctuary Permitting .....	5
Regional/National Marine Sanctuary System News .....	6
Regional/National Marine Sanctuary Foundation News .....	8
Contact Information .....	10

#### TREATY TRUST RESPONSIBILITIES

Olympic Coast National Marine Sanctuary (OCNMS) seeks to work directly with the Coastal Treaty Tribes on a government-to-government basis to promote a healthy ecosystem in the waters adjacent to the Olympic Peninsula for the support and enhancement of tribal treaty rights and resources, cultural resources and activities, tribal self-determination, and sovereignty. OCNMS supports and works with the Olympic Coast Intergovernmental Policy Council to obtain guidance and the collective views of the Coastal Treaty Tribes and the state of Washington on maintaining a healthy marine ecosystem in the waters off the Olympic Peninsula for the benefit of all citizens and for future generations.

#### COLLABORATIVE AND COORDINATED MANAGEMENT

##### Pumpout infrastructure capacity on Olympic Coast

The Quileute Tribal Council has approved a proposal to provide the La Push Marina with a sewage pumpout station. This proposal is for the National Marine Sanctuary Foundation to acquire and the Quileute Tribe to install a sewage pumpout at the La Push Marina, which will improve water quality in the sanctuary by creating infrastructure capacity that does not currently exist. Presently, there are no functioning sewage pumpouts at marinas adjacent to the sanctuary. Port Angeles or Westport are the closest marinas with such capability. The La Push Marina is the only marina directly adjacent to the sanctuary on the outer coast. It serves as the home port for Quileute fishers, and is used heavily by recreational fishers and other tourists. The target audience includes all vessels using the La Push marina, particularly recreational tourists. The sanctuary's research vessel is docked at the La Push Marina for most of the field season and would also plan to utilize this pumpout. The Quileute Tribe would install, maintain and operate the station. There may be the possibility of collaboration between the sanctuary and Quileute tribe on marina signage for both boater safety and sewage discharge soon.

## CONDUCT COLLABORATIVE RESEARCH, ASSESSMENTS, AND MONITORING TO INFORM ECOSYSTEM-BASED MANAGEMENT

### Olympic Coast National Marine Sanctuary assists Makah Fisheries in Halibut sampling

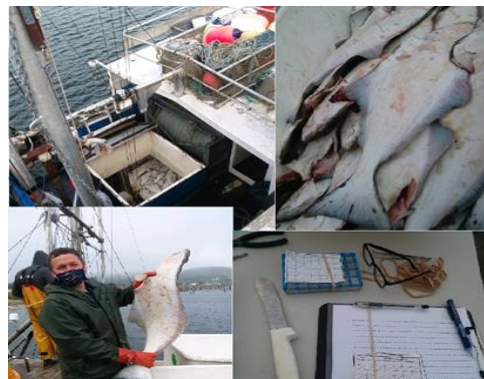


Figure 1 Clockwise starting at upper left: Fishing vessel hold with halibut, Halibut ready for measurements, Tools for collecting an recording data, Tom Moore helps move fish during surveys.

In early June the Makah Tribal Council approved a second 24 hour Unrestricted Fishery event which was followed by a request from Makah Fisheries Management for support in monitoring their halibut fishery. Sampling of halibut caught during the 24 hour event is completed immediately afterward by Makah Fisheries Management and volunteers. At the request of the Makah Tribe, on May 14 and June 4-5, sanctuary staff assisted Makah Natural Resources staff with sampling halibut harvested from the Makah Tribe's usual and accustomed fishing areas. Tasks involved counting and handling fish, and recording data collected. Participants in the event followed Makah Tribe implemented COVID-19 public health protocols.

### Seismic Survey occurring within Olympic Coast National Marine Sanctuary

The R/V *Marcus G. Langseth* and R/V *Rachel Carson* entered Olympic Coast National Marine Sanctuary the morning of June 25, 2021 as part of their National Science Foundation funded seismic survey of the Cascadia Subduction Zone, but due to weather conditions had to shift their survey further north. The vessel will return to OCNMS and will be surveying in the sanctuary for a total of 1-2 days during daylight hours only. National Marine Sanctuary Act 304(d) consultation and permitting were conducted to enhance the mitigation measures to reduce potential take of sanctuary resources. Consultation with the coastal treaty tribes also took place, the vessel and OCNMS have notified tribal staff on the timing of the survey to notify tribal fishers. The seismic survey has been underway since early June, surveying off of the Oregon Coast. The survey will span areas offshore of Oregon, Washington, and British Columbia, Canada.

### Olympic Coast National Marine Sanctuary continues its long-term Oceanographic Monitoring Program on Washington's Pacific Coast

Building on more than two decades of field work, Olympic Coast National Marine Sanctuary (OCNMS) continued its oceanographic mooring program by successfully deploying 10 coastal, summer-time moorings between Makah Bay and Cape Elizabeth, WA. The transit of the R/V *Tatoosh* from Port Angeles to the coast, and mooring operations, were delayed a couple of weeks due to lingering COVID-19 impacts on vessel maintenance and rough sea conditions. Instruments on the deployed mooring arrays will collect temperature, conductivity, salinity, and density data throughout the water column. Additionally, dissolved oxygen and pressure data will be collected 1 meter off the bottom; and water velocity and direction, fluorescence, and turbidity data will be collected 4 meters below mean lower low water at several sites. CTD cast profiles of temperature, conductivity, pressure, dissolved oxygen, fluorescence and light transmission were conducted at all mooring



Figure 2 Survey Technician Kathy Hough adjusts the wench in preparation for instrument deployment.

sites. One acoustic sound trap mooring was also recovered, and four were deployed for summer data collection. Whole and filtered water samples were collected at each mooring site as part of a long-running partnership with the Quileute Tribe.

## **IMPROVE OCEAN LITERACY**

### **Olympic Coast AmeriCorps bring Sanctuary Splash! Humpback Whale virtual program into Olympic Peninsula classrooms!**

Olympic Coast National Marine Sanctuary AmeriCorps, Cheyenne Palmo and Holly Keedy, joined virtual classrooms across the Olympic Peninsula to present the Sanctuary Splash! Meet the Humpback Whale and Acoustics of Cetaceans program. The program reached 116 regional elementary school students through virtual and hybrid classrooms, including students at Simpson Elementary School, Crescent School, Lake Quinault Elementary School, Neah Bay Elementary School, and Quileute Tribal School. The Sanctuary Splash! Program introduces students to humpback whales, including their basic anatomy, behaviors, and vocalizations. Students were eager to discuss the large mammals that frequent the nearby coastal waters.

### **AmeriCorps Washington Service Corps hosts virtual recruitment fair**

Olympic Coast National Marine Sanctuary (OCNMS) education staff participated in the first AmeriCorps Washington Service Corps (WSC) virtual recruitment fair using the online platform Brazen. The virtual recruitment provided the opportunity for potential AmeriCorps members to learn about the available positions around the state as a Service Corps member. OCNMS joined 25 other organizations to share information on their AmeriCorps positions for the 2021-2022 Service Term. During the recruitment fair, OCNMS engaged with eight individuals who showed interest in one of the two National Marine Sanctuary Foundation Environmental Education and Stewardship Specialist positions in support of NOAA and OCNMS.

### **Olympic National Park Coastal Interpretive Rangers get into their sanctuary**

Olympic Coast National Marine Sanctuary (OCNMS) staff met with the 2021 Olympic National Park (ONP) coastal Interpretive Rangers at Kalaloch beaches as part of the new staff orientation to Olympic Coast. The two permanent rangers and ten seasonal rangers will be interacting with the three million plus visitors to Olympic National Park and Olympic Coast National Marine Sanctuary along the 70 miles of shared federally protected coastline. ONP rangers were provided an overview of OCNMS, including our history and mission as well as key talking points around stewardship, conservation, ocean acidification, marine debris and climate change. With some amazing low tides that day rangers also enjoyed practicing tidepool interpretation and beach etiquette, while enjoying the beauty and inspiration of our sanctuary waters.

### **Seafloor Mapping wraps up Spring Ocean Exploration and Research teacher workshops**

Olympic Coast National Marine Sanctuary (OCNMS) education staff conducted a Seafloor Mapping follow-up workshop as an Alliance Partner with NOAA's *Office of Ocean Exploration and Research* (OER). Leading up to the follow-up workshop, teachers spent 90 minutes with a seafloor mapping specialist for a question and answer session as well as receiving an introduction to a new seafloor mapping classroom curriculum. 18 teachers participated in the follow-up workshop where they learned about mapping and charting efforts locally along with the tools required to complete mapping missions. A review and comment session on the new *Watching in 3D* curriculum that uses the Fledermaus software was particularly useful for teachers hoping to utilize this new tool in their classrooms. We also reviewed the *Wet Maps* curriculum where students or teachers create their own mystery ocean seafloor, and challenge their classmates to use the tools available to them to map that

seafloor with the data they collect. Teachers received a toolkit of supplies to help implement these deep sea curriculums in their classrooms, along with a certificate from OER, Continuing Education clock hours from OCNMS, and a small participation stipend. The popular OER Mini Professional Development for teachers will start up again in the fall.

### **Olympic Coast National Marine Sanctuary announces their Volunteer of the Year**

Annually the National Marine Sanctuary Foundation (NMSF) provides an opportunity for national marine sanctuaries to celebrate the invaluable role of volunteers through the NMSF Volunteer of the Year awards. Olympic Coast National Marine Sanctuary was pleased to recognize the work of Seamus Harris. Soon after the pandemic changed our world and social engagement, Seamus offered to assist Olympic Coast National Marine Sanctuary education and outreach team with video technical support, providing numerous outreach products that are regularly being used for K-12 distance learning activities and general outreach. The videos he produced allowed the sanctuary to develop products that are more engaging and relevant in raising awareness about Olympic Coast, the entire National Marine Sanctuary System, and the changing ocean. Thank you, Seamus!



*Figure 3 Seamus Harris with his guitar*

### **Salmon and Orcas: The stories of science with NOAA Fisheries and Lynda Mapes**

Olympic Coast National Marine Sanctuary partnered with NOAA Fisheries West Coast Region to provide a National Marine Sanctuaries Webinar Series focused on the Southern Resident killer whales and the regional efforts to understand and protect this apex predator. Lynda Mapes, award-winning journalist with Seattle Times has a new book *ORCA: Shared Waters, Shared Home*, released in June 2021, which describes how NOAA Fisheries scientists seek to unravel connections between endangered Southern Resident killer whales, threatened Puget Sound Chinook salmon, and the rest of the marine ecosystem.

The presentation was a chance to hear from those scientists and the journalist who covers them as they examine the smallest organisms in the ocean, looking for clues to understanding salmon survival, as well as from the biologists who have recently identified the sources of Southern Resident prey across much of the West Coast. Together they told the stories of salmon survival and the native Northwest habitat our salmon and steelhead depend on -- and that we can all help restore. The webinar had 791 registered attendees, with 401 live attendees.



*Figure 4 Panelists and images from Salmon & Orca webinar. Clockwise from top left: Forbes Darby, Orca dorsal fin and breaching orca, Chinook salmon, Orca tail, orca with captured salmon, Marla Holt, Brian Burke, Lynne Barre, and Lynda Mapes.*

## SANCTUARY PERMITTING

### Issued Permits and Authorizations

#### **OCNMS-2021-007** Global Diving and Salvage

Project Title: Survey and removal of sunken 48' Pacemaker motor vessel

Permitted Activity: Global Diving will conduct a hydrographic survey to locate and determine the condition of a reported sunk 48' Pacemaker power vessel for the responsible party. Using sidescan and multibeam sonar systems, appropriate targets will be identified for visual surveys using a remotely operated vehicle. Results will be communicated and the search area can be expanded pending findings as required. Global Diving and Salvage will develop a salvage plan and submit a permit amendment for possible salvage.

Permit Duration: Requested start date of May 1, 2021 through October 31, 2021

Comment: Vessel has been located and confirmed

#### **OCNMS-2021-008** International Pacific Halibut Commission

Project Title: IPHC Fishery-Independent Setline Survey (FISS)

Permitted Activity: IPHC will conduct annual Fishery-Independent Setline Survey (FISS) to inform stock assessments. The FISS has been designed to maximize coverage over the charter regions and consist of a regular distribution of stations on a 10 nautical mile by 10 nautical mile grid; of those stations, 27 are offshore of Washington and fall inside OCNMS boundaries.

Permit Duration: June 4, 2021 through June 3, 2026

Comment:

#### **OCNMS-2021-009** E/V Nautilus

Project Title: NA128: Methane Seeps of the Cascadia Margin

Permitted Activity: The main objectives of this expedition are to conduct remotely operated vehicle dives on unexplored methane seeps and on hydrate sites along the U. S. Cascadia Margin (located offshore Washington, Oregon, and northern California) during daytime hours, and water column and seafloor mapping during transit and nighttime hours. The ROV dives will focus on several unexplored regions along the Cascadia Margin and aim to cover sampling at methane seep sites on the shelf, the upper, mid- and lower slope, and at the base of the slope. One to two dives are expected to occur within OCNMS near Quillayute Canyon.

Permit Duration: July 22, 2021 through September 8, 2021.

Comment:

### Pending Permits and Amendments

#### **OCNMS-2021-007-A1** Global Diving and Salvage

Project Title: Survey and removal of sunken 48' Pacemaker motor vessel

Proposed Permitted Activity: Global Diving and Salvage has located the MV Unwind and are proposing to salvage the vessel by safely lifting the hull clear of the water to a deck barge while minimizing the potential for release of possible pollution.

Requested Permit Duration: Requested start date of July 1, 2021 through October 1, 2021

Comment: The vessel was located 5 miles offshore of La Push in 130 feet of water.

## REGIONAL/NATIONAL MARINE SANCTUARY SYSTEM NEWS

### **Sanctuaries Video Series Recognized for Excellence in Digital Communications**

Sanctuaries 360°: Explore the Blue video series won a People’s Voice Webby Award in the “Virtual and Remote - Science & Education” category. A Webby Award is like an “Academy Award” for digital media. The Webby Awards are presented by the International Academy of the Digital Arts and Sciences (IADAS) and is the leading international award honoring excellence on the internet. This accomplishment follows the two video series (National Marine Sanctuaries 360°: [Explore the Blue Virtual Reality \(VR\) series](#) and [Stories from the Blue](#)) winning Awards of Excellence at 2021 Communicator Awards earlier this month. The Sanctuaries 360°: Explore the Blue series was launched last year to bring a collection of virtual underwater experiences to people throughout the world. These videos and lesson plans proved to be extremely popular over the last year and gave homebound students, teachers and those seeking an escape a virtual outlet to experience our national marine sanctuaries.

### **Dive Clean-up Highlights Impact of Goal: Clean Seas Florida Keys**

Fabien Cousteau, grandson of environmental icon Jacques-Yves Cousteau, was part of a team that removed almost 700 pounds of derelict traps, rope and other debris from the sea floor off Key Largo as part of Florida Keys National Marine Sanctuary’s Goal: Clean Seas Florida Keys. The dive took place in an area known as Turtle Reef and was organized by Blue Star Operator, “The Dive Shop at The Reef.” Goal: Clean Seas Florida Keys program was established in 2018 in the wake of Hurricane Irma to remove debris scattered across the sea floor. The National Marine Sanctuary Foundation provides grants to Blue Star Dive operators who have been properly trained and permitted in sea floor clean up. More than 50,000 pounds of debris have been removed to date. The dive was also helmed by members of Ocean Rebels, a group of powerful women championing environmental change through films, advocacy, and expeditions.

### **National Ocean Service offices team up to reduce shotgun wad debris**

Greater Farallones National Marine Sanctuary and the Marine Debris Program released a [report](#) that recommends reducing plastic shotgun wads in the sanctuary, waterways and beaches. Through a partnership with hunting reserves and waterfowl hunters, the project developed behavior changing strategies that encourage proper disposal and/or use of biodegradable shotgun wads. A recent NOAA Marine Debris Monitoring and Assessment Program supported by the Marine Debris Program and executed by the sanctuary, identified wads as one of the top ten most commonly found items across 324 marine debris beach surveys over seven years. Report recommendations address: 1) ways to implement a lasting behavior change campaign; 2) lack of alternative biodegradable ammunition and suggestions for retail procurement; and 3) how policy, California legislation, and financial investment can help promote biodegradable ammunition. This commitment of NOS offices and programs to reducing marine debris has resulted into an effective on-the-ground campaign to reduce debris items of concern.

### **Respect. Protect. Enjoy. Promoting responsible wildlife viewing.**

The Office of National Marine Sanctuaries is excited to announce the release of new [Wildlife Viewing Guidelines](#) in English and Spanish. These simple guidelines for along the shore and on the water activities were designed in coordination with NOAA Fisheries, the Respect Wildlife campaign, the Recreate Responsibly coalition, and multiple state and federal wildlife agencies. The goal of the guidelines is to engage and educate the public on how to have an enjoyable adventure while reducing the chance of human/wildlife conflicts. Compatible use of national

marine sanctuaries such as responsible recreation, can be a critical tool to create awareness and promote stewardship of sanctuary resources. The public is encouraged to show their support for wildlife and inspire others to do the same by taking the “Wildlife Pledge” (in English and Spanish). #WildSanctuaries.

### **Stellwagen Bank National Marine Sanctuary Brings Partners Together in Virtual Recreational Fishing Clinic**

Stellwagen Bank National Marine Sanctuary (SBNMS) and the Hispanic Access Foundation ran a virtual recreational fishing "clinic" and National Fishing and Boating Week celebration, in partnership with the Greater Atlantic Regional Fisheries Office (NMFS), Massachusetts Division of Marine Fisheries, and the City of Lawrence. Prior to the event, 20 families received recreational fishing gear and handouts featuring each partner organization, as well as guides to fishing regulations, permits, and ethical angling practices. The webinar was simultaneously translated into Spanish and featured a presentation connecting the sanctuary to the community, trivia questions, and fishing gear demonstrations. The event resulted in a bilingual video and handouts that can be used for similar programs in other communities in the future. SBNMS staff have been working with the Lawrence and Boston Hispanic communities for a number of years, and this program builds on that success and helps deepen our connections with these communities. This event connected a key sanctuary community to their coast, sanctuary and sister sanctuary in the Dominican Republic, and the national marine sanctuary system.

### **Whale Entanglement Response Training for NOAA Fisheries’ Office of Law Enforcement Officers Stationed Throughout Alaska**

The Hawaiian Islands Humpback Whale National Marine Sanctuary conducted a virtual large whale entanglement response training and briefing for NOAA Fisheries Office of Law Enforcement officers stationed in Alaska. The 2-hour training was also open to Alaska’s state Wildlife Troopers and members of the U.S. Coast Guard – District 17 and focused on inter-agency cooperation and support towards large whale entanglement response efforts. Large whale entanglement response can be dangerous for the animals and responders. It requires experienced, trained and well-equipped personnel. NOAA’s Office of Law Enforcement plays an integral part in large whale entanglement response efforts. The sanctuary program assists NOAA Fisheries with coordination of large whale entanglement response efforts on Alaska, and has a long-term partnership working alongside and under NOAA Fisheries Marine Mammal Health and Stranding Response Program.

### **ONMS Releases Climate Resilience Plan**

NOAA’s Office of National Marine Sanctuaries has released the [ONMS Climate Resilience Plan](#) to guide the Office’s work on climate issues over the coming years and bring visibility to the role of sanctuaries as test beds for climate science, adaptation, and education. National marine sanctuaries, marine national monuments, and other MPAs are being increasingly recognized as part of the solution to the impacts of climate change. This report outlines steps ONMS will take in the next three years to understand and begin to address climate impacts. Addressing climate change and conserving the ocean are priorities for this Administration and this Congress, and ONMS has identified climate as a high priority.

## REGIONAL/NATIONAL MARINE SANCTUARY FOUNDATION NEWS

### **Capitol Hill Ocean Week convenes virtually with a focus on a more racially equitable and just ocean and Great Lakes movement**

<https://marinesanctuary.org/news/capitol-hill-ocean-week-convenes-virtually-with-a-focus-on-a-more-racially-equitable-and-just-ocean-and-great-lakes-movement/>

Capitol Hill Ocean Week (CHOW), convened by the National Marine Sanctuary Foundation, gathers people from across the U.S. and around the world to engage in dialogue on how to sustain the health of our ocean and Great Lakes, and especially for all who call these places home and depend on them for their livelihoods. This year, we will hear from people working on this issue in communities across the country, listening to learn from their perspectives on how to grow a more racially equitable and just ocean and Great Lakes conservation movement

### **Community partners celebrate designation of Wisconsin Shipwreck Coast National Marine Sanctuary**

<https://marinesanctuary.org/news/community-partners-celebrate-designation-of-wisconsin-shipwreck-coast-national-marine-sanctuary/>

Community leaders, local cultural organizations, and national conservation groups celebrated the designation of [Wisconsin Shipwreck Coast National Marine Sanctuary](#), announced today by the National Oceanic and Atmospheric Administration and the State of Wisconsin. Wisconsin Shipwreck Coast becomes our nation's 15th marine sanctuary and joins America's national marine sanctuaries as the essential network of protected waters, which sustain miraculous species, coastal communities, and our shared heritage. The shipwrecks in Lake Michigan preserve a legacy of industry and commerce that led to westward expansion. They embody the deep-rooted connections among communities of the Great Lakes and the entrepreneurial spirit of generations.



## OCNMS Online

*Please take a few moments to peruse the site. Your feedback is greatly appreciated.*

### Visit our website at:

<http://olympiccoast.noaa.gov/>

*Comments and suggestions can be sent to:*

[jacqueline.laverdure@noaa.gov](mailto:jacqueline.laverdure@noaa.gov).

### Follow us on Facebook and Twitter!



<https://www.facebook.com/usolympiccoastgov>



<https://twitter.com/olympiccoast>

## Ocean-Related Websites

National Oceanic and Atmospheric Administration <a href="http://www.noaa.gov/">http://www.noaa.gov/</a>	National Data Buoy Center <a href="http://www.ndbc.noaa.gov/rmd.shtml">http://www.ndbc.noaa.gov/rmd.shtml</a>	Washington's Ocean Resources <a href="http://www.ecy.wa.gov/programs/sea/ocean/index.html">http://www.ecy.wa.gov/programs/sea/ocean/index.html</a>
National Ocean Service <a href="http://oceanservice.noaa.gov/">http://oceanservice.noaa.gov/</a>	NOAA Pacific Marine Environmental Laboratory <a href="http://www.pmel.noaa.gov/">http://www.pmel.noaa.gov/</a>	Northwest Association of Networked Ocean Observing Systems <a href="http://www.nanoos.org/">http://www.nanoos.org/</a>
Office of National Marine Sanctuaries <a href="http://sanctuaries.noaa.gov/">http://sanctuaries.noaa.gov/</a>	CoastWatch – West Coast Regional Node <a href="http://coastwatch.pfel.noaa.gov/">http://coastwatch.pfel.noaa.gov/</a>	Office of National Marine Sanctuaries – Earth is Blue <a href="https://sanctuaries.noaa.gov/earthisblue.html">https://sanctuaries.noaa.gov/earthisblue.html</a>
NOAA Ocean Explorer <a href="http://oceanexplorer.noaa.gov/">http://oceanexplorer.noaa.gov/</a>	NOAA Marine Debris Program <a href="http://marinedebris.noaa.gov/">http://marinedebris.noaa.gov/</a>	National Marine Sanctuary Foundation <a href="https://marinesanctuary.org/">https://marinesanctuary.org/</a>

## OLYMPIC COAST NATIONAL MARINE SANCTUARY

### LEARN MORE ABOUT YOUR SANCTUARY

The Sanctuary Office Report is produced bi-monthly by Olympic Coast National Marine Sanctuary in conjunction with sanctuary advisory council meetings. To learn more about the sanctuary, please visit our website at: <http://olympiccoast.noaa.gov/>.

To learn more about the sanctuary advisory council, please visit:  
[http://olympiccoast.noaa.gov/involved/sac/sac\\_welcome.html](http://olympiccoast.noaa.gov/involved/sac/sac_welcome.html)

### OFFICE OF NATIONAL MARINE SANCTUARIES (ONMS)

Olympic Coast National Marine Sanctuary is one of the marine protected areas in the National Marine Sanctuary System encompassing more than 600,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys and from Lake Huron to American Samoa. The system includes 14 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.

Visit the ONMS website at:  
<http://sanctuaries.noaa.gov/>.

### Get Involved!

To learn how to get involved in the sanctuary visit:

<http://olympiccoast.noaa.gov/involved/welcome.html>

### OCNMS STAFF

**Carol Bernthal** – Superintendent

**Kevin Grant** – Deputy Superintendent for Operations & Administration

**George Galasso** – Deputy Superintendent for Policy & Programs

**Anna Hallingstad** - NOAA Corps Officer, Vessel Operations Coordinator

**Jenny Waddell** – Research Coordinator

**Katie Wrubel** – Resource Specialist

**Kathy Hough** – Survey Technician

**Chris Butler-Minor** – Community Engagement Specialist

**Jacqueline Laverdure** – Education & Outreach Coordinator

**Nicole Harris** – Education Specialist

**Robert Rountree** – Visitor Services Specialist

**Carey Floyd** – Graphic & Web Designer

**Cheyenne Palmo** – Washington Service Corps AmeriCorps member Education and Stewardship Specialist

**Holly Keedy** – Washington Service Corps AmeriCorps member Education and Stewardship Specialist

### CONTACT INFORMATION

#### Olympic Coast National Marine Sanctuary

115 East Railroad Ave., Suite 301  
Port Angeles, WA 98362  
Phone (360) 406-2074  
Fax (360) 457-8496

