





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 150 documented historical shipwrecks and the vibrant contemporary cultures of the Makah, Quileute, and Hoh Indian Tribes and the Quinault Nation.

OFFICE REPORT OLYMPIC COAST NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

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

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	
Conserve Natural Resources In The Sanctuary	
Sanctuary Permitting	
Learn About Your Sanctuary / Natural History	
Regional / National Marine Sanctuary System News	
Regional / National Marine Sanctuary Foundation News	
Contact Information	
	- 0

TREATY TRUST RESPONSIBILITIES

Native, indigenous, and tribal collaboration survey for National Marine Sanctuary System

Collaboration with tribal or indigenous cultures is an integral part of the management of our sanctuaries and monuments. To accomplish this, the Office of National Marine Sanctuaries Maritime Heritage Program is seeking to comprehensively identify our level of engagement with tribal and indigenous partners where we share the responsibility for preserving cultural heritage in our sites. The goal of this internal ONMS survey is to expand and enhance our recognition of the full spectrum of tangible and intangible underwater cultural heritage within our stewardship responsibility and implement effective management strategies to preserve them. Olympic Coast National Marine Sanctuary's experiences working with the Hoh, Makah, and Quileute Tribes, and the Quinault Nation will be an important contribution to this effort.

COLLABORATIVE AND COORDINATED MANAGEMENT

Olympic Coast National Marine Sanctuary joins joint webinar on ocean acidification and marine protected areas

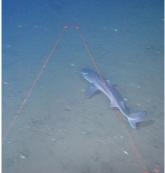
A webinar held on 25 September featured three panelists in a discussion on the intersection of ocean acidification (OA) and marine protected areas (MPAs). The well-attended event was jointly sponsored by Washington Sea Grant, the OA Information Exchange (OAIE), OCTO, and NOAA's MPA Center. Featured talks included a case study on how Oregon's marine reserves are addressing OA; experiences from the sanctuary's 20-year oceanographic mooring program and proposed OA Sentinel Site; and the new OAIE platform for collaboration on OA research, which aims to connect scientists, managers, and other marine professionals in an effort to foster partnerships and facilitate discussions on OA, hypoxia, and other related aspects of environmental change around the region and beyond.

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

Olympic Coast explores deep sea corals and sponges of Juan de Fuca Canyon

Olympic Coast National Marine Sanctuary staff recently wrapped up a week-long research expedition on the NOAA Ship *Bell M. Shimada* to explore areas within a submarine canyon believed to contain deep sea coral and sponge communities. The research cruise, September 10-16, 2019, was sponsored by NOAA's Deep Sea Coral Research and Technology Program (DSCRTP) as a product of the West Coast Deep Sea Coral Initiative. The cruise involved scientists from several NOAA offices and employed a remotely operated underwater robot known as the *Beagle* – a remotely operated vehicle (ROV) owned and operated by scientists at Marine Applied Research and Exploration. Despite challenging winds and waves that tested the operational capacity of both the ship and the robot, the team worked diligently to accomplish the mission, which included quantitative surveys at five ROV dive locations in the central portion of the canyon. Still images, videos, and 12 specimen collections were gathered during the expedition. Quantitative transects will be analyzed by experts for comparison to other west coast sites and summarized as part of the initiative's efforts. Resulting data will also be added to the worldwide database of deep sea coral and sponge records maintained by DSCRTP at https://deepseacoraldata.noaa.gov/







Olympic Coast Partners with USFWS and WDFW on Sea Otter Census Counts

Olympic Coast National Marine Sanctuary staff spent two days in Lacey, Washington at the offices of the U.S. Fish and Wildlife Service helping to process photos of sea otters taken during flights in late June. The team had a long day getting through the images and producing a minimum count for the population of Washington sea otters, over 90% of which live in the sanctuary. The previous survey, conducted in 2017, found 2,058 sea otters in the survey area, which stretches along the entire outer coast of Washington state and into the Strait of Juan de Fuca as far as Port Angeles. Results will be published in a report due out this fall, but preliminary indications are that the population has continued to grow in the intervening two years.

IMPROVE OCEAN LITERACY

New Marine Discovery Center conceptual design presentation

The final presentation by MIG Portico, an architectural design firm based in Seattle, Washington for the conceptual design for a proposed new marine discovery center in Port Angeles, Washington was provided to staff, board members, and volunteers from Olympic Coast National Marine Sanctuary, Feiro Marine Life Center, and Olympic Coast National Marine Sanctuary Foundation.

NOAA B-WET program awards \$476,035 to Washington and Oregon organizations for environmental education



NOAA's Pacific Northwest Bay Watershed Education and Training (B-WET) program announced \$476,035 in awards to Washington and Oregon organizations which will assist with community-based environmental education programs. The grants support standards-based, hands-on education activities that promote greater understanding about watersheds, the ocean, and protected areas such as national marine sanctuaries. Funding was awarded to academic, tribal, and nonprofit groups serving underrepresented students and communities. Programs will provide Meaningful

Watershed Educational Experiences (MWEEs) for students, related professional development for teachers, and help to support regional education and environmental priorities in the Pacific Northwest, including ocean acidification. Funded organizations include Feiro Marine Life Center, Lummi Indian Business Council, Mid-Columbia Fisheries Enhancement Association, Nisqually River Foundation, Nooksack Salmon Enhancement Association, Oregon State University, Port Townsend School District #50, and University of Washington. The Pacific Northwest B-WET regional program is managed by NOAA's Office of Education and NOAA's Olympic Coast National Marine Sanctuary.

Olympic Coast National Marine Sanctuary and National Marine Sanctuary Foundation announce funding for eight Ocean Guardian Schools in Washington and Oregon

NOAA's Olympic Coast National Marine Sanctuary and the National Marine Sanctuary Foundation announced eight Ocean Guardian School Program awards to Washington and Oregon PreK-12 schools to promote ocean conservation at schools or in their local communities. Grants range from \$1,000 to \$4,000 per school, depending on the level of the project and funding year. Projects support one of five project pathways, including Watershed Restoration, Marine Debris, Schoolyard Garden / Habitat, Reduce/Reuse/Recycle/Rot/Refuse/ Rethink, or Energy & Ocean Health. Awards for the 2019-2020



school year went to Blue Heron School, Chimacum Elementary School, Crescent School District, Olympic Peninsula Academy, Quileute Tribal School, Salish Coast Elementary, Siuslaw Middle School, and Warrenton Prep. Harbor Lights Middle School is also participating during the 2019-2020 school year as a no-cost extension ongoing from last year's project.

Oregon Aquarium annual Coastal Learning Conference for educators

Olympic Coast National Marine Sanctuary staff and other environmental organizations interacted with pre-K-12 teachers, informal educators, higher education and others to share and refine their skills for using ocean and coastal resources as a context for learning across grades and subjects. The goal of the

conference was to empower educators to use their community and local natural resources to engage students in learning. Sanctuary staff shared resources for teachers including B-WET (Bay Watershed Education and Training), Ocean Guardian School Program, Office of National Marine Sanctuaries, and NOAA Education, as well as engaged aquarium visitors while at the conference.

CONSERVE NATURAL RESOURCES IN THE SANCTUARY

More than 700 Washington CoastSavers volunteers clean beaches during 2019 International Coastal Cleanup

The drizzling rain was no distraction for hundreds of volunteers participating in the International Coastal Cleanup on Saturday September 21, 2019. A total of 790 volunteers participated in the cleanup on beaches from Columbia River to Cape Flattery and along the Strait of Juan de Fuca. Olympic Coast National Marine Sanctuary (OCNMS) staff and Washington Service Corps AmeriCorps members organized volunteers at Neah Bay registration station on Makah Reservation, coordinating cleanups at Hobuck, Shi Shi and Tsoo-Yess beaches. OCNMS is a founding member of Washington CoastSavers and contributes significantly to the organization's long-range planning, funding, and event coordination.





SANCTUARY PERMITTING

Issued Permits and Authorizations

OCNMS-2019-010 - Daniel Stabbert, Pacific Survey Group, LLC

Project Title: AUV and ROV Operational Tests within OCNMS

<u>Permitted Activity</u>: The testing of a Kongsberg Autonomous Underwater Vehicle (AUV), with mounted high resolution interferometric synthetic aperture sonar aka HISAS Sonar, LIDAR, magnetometer, and high-resolution video and photography equipment. Primary focus is AUV testing with limited ROV high resolution camera comparisons to collected AUV HISAS data. Additionally, the support vessel (R/V *Ocean Titan*) is outfitted with a low noise, Kongsberg EM124 multibeam echo sounder which will compare bathymetry position accuracy to AUV position data. The multibeam echo sounder will also evaluate sub-bottom capabilities.

<u>Project Location</u>: Throughout the sanctuary, concentrated in the Juan de Fuca Canyon Permit Duration: From October 25, 2019 through February 25, 2020

<u>Comment</u>: The deep ocean canyons, within a short distance of Puget Sound, make the sanctuary an attractive location to test this technology. The sharing of the collected data assists in the management of the sanctuary.

Pending Permits

OCNMS-2017-009-A1 – Brad Hanson, Northwest Fisheries Science Center

<u>Project Title</u>: Determining the distribution of killer whales and other cetaceans in the coastal waters of the U.S. using acoustic recorders

Permitted Activity: Requested deployment of three bottom-anchored moorings acoustic recorders.

<u>Project Location</u>: The proposal is to reoccupy the currently occupied locations.

<u>Permit Duration</u>: While the requested period is from September 4, 2019 through December 31, 2021, the current permit is valid through December 31, 2019 allowing additional time to process the permit. <u>Comment</u>: Little is known about the coastal movements of cetaceans, particularly the southern resident killer whale community, in the winter months. This data gap has been identified as a key element in better understanding the role of potential risk factors to this cetacean population. This project will study all cetaceans but the focus will be southern resident killer whales. Southern resident killer whales have been observed in the Olympic Coast, Greater Farallones, and Monterey Bay national marine sanctuaries in the winter.

OCNMS-2019-007 John Mickett, University of Washington Applied Physics Laboratory Project Title: Deployment of a subsurface, near real-time, HAB-detection mooring at the UW-NANOOS Mooring Site

<u>Permitted Activity</u>: Deployment of a mooring for four consecutive spring-to-fall periods starting in the spring of 2021, with the mooring positioned at the UW-APL/NANOOS mooring site.

Project Location: 13 miles WNW of La Push

Permit Duration: Requested from January 1, 2020 through December 31, 2025

<u>Comment</u>: Observations from this mooring will be displayed in near-real time on the NANOOS Real-time HABs website: http://www.nanoos.org/products/habs/real-time/home.php. Additionally, email notifications will be sent for any toxin levels detected above a set threshold.

LEARN ABOUT YOUR SANCTUARY / NATURAL HISTORY

Visitors dive into Olympic Coast National Marine Sanctuary during 18th annual "Dungeness Crab and Seafood Festival"

Olympic Coast National Marine Sanctuary (OCNMS) was part of the 18th annual "Dungeness Crab and Seafood Festival," October 11-13, 2019 in Port Angeles, Washington. Sanctuary education staff and volunteers hosted an educational booth including sanctuary information. In celebration of the 25th anniversary since designation, OCNMS highlighted the natural wonder of our ocean. Visitors experienced virtually diving into the sanctuary using Oculus Go goggles to see 360° views of underwater scenery collected during subtidal dives near Tatoosh Island. Participants appreciated the beautiful vistas while staying warm and dry. Informal estimates

indicate participation was at an all-time high for the festival, soaring past the 10,000+ annual visitors to this event.







Expanding the "Virtual Dive" gallery for Olympic Coast National Marine Sanctuary

This summer, divers were able to use a special 360° camera to collect new imagery from Koitlah Point, at the northeastern boundary of the sanctuary to expand the gallery of "virtual dives" available to anyone with a smart phone or virtual reality goggles. Although it will take time to process the new imagery, viewers currently can to link to images on their smartphone by texting "OCNMS" to the number: 24-587 or visit https://sanctuaries.noaa.gov/vr/olympic-coast/ to access six virtual dives from Tatoosh Island.

Speaker series event to spotlight photos of "Father of Ecology"



http://www.sequimgazette.com/life/speaker-series-event-to-spotlight-photos-of-father-of-ecology/.

Speaker Michael Hemp leads an exploration of the origins of ecology in the Pacific Northwest in the 1930s with "A Whole New Tide Pool in Pacific Northwest Ecology: The Role of Cannery Row's Edward F. Ricketts." The presentation was co-hosted by Feiro Marine Life Center and NOAA's Olympic Coast National Marine Sanctuary at the John Wayne Marina, 2577 W. Sequim Bay Road.

Noted marine biologist Ed Ricketts is pictured at Point Wilson Lighthouse in Port Townsend in July 1930. Photo from Jack Calvin Photo/Pat Hathaway Collection

REGIONAL / NATIONAL MARINE SANCTUARY SYSTEM NEWS

Office of National Marine Sanctuaries participates in IUCN Latin American and the Caribbean Protected Area Congress (CAPLAC) https://www.areasprotegidas-latinoamerica.org/
The Marine Protected Areas Center represented NOAA at the Third IUCN Latin American and the Caribbean Protected Area Congress (III CAPLAC). The meeting, hosted in Lima, Peru (October 14-18, 2019), was the first CAPLAC since 2007 and was attended by nearly three thousand representatives from 40 countries. The Congress represented an opportunity for government authorities and non-government representatives; multilateral organizations; leaders from local, traditional, and indigenous communities; and the private sector to discuss advances and challenges on protected areas, report on regional progress towards achieving the Achi Targets (for marine and terrestrial protected areas), and prepare for the 2020 World Conservation Congress.

Marine Protected Areas (MPA) Center participates in Trans-Atlantic MPA Partnership Meeting NOAA's Marine Protected Areas Center participated in a workshop of the Trans-Atlantic Marine Protected Area Partnership, a project funded by the European Commission to foster greater collaboration of MPAs across the Atlantic. The meeting was held September 11-13 in Viano do Castillo, Portugal to focus on finalizing a tool that integrates management of marine mammals into MPA management plans. Other breakout groups focused on tools to strengthen coastal resilience of MPAs, and to foster collaboration across existing regional MPA networks – such as MEDPAN (Mediterranean), NAMPAN (North America), CAMPAM (Caribbean), and RAMPAO (West Africa). The marine mammal and resilience tools will be finalized by November 2019, when the close-out meeting for the current project will be held. A new three year phase of the project has been approved by the EU, and will continue activities in the Atlantic, as well as expanding to include a focus on habitat restoration in the Coral Triangle.

Marine Protected Areas Federal Advisory Committee (MPAFAC) is terminated

As a result of Executive Order 13875, the MPAFAC was terminated by the Department of Commerce when its charter expired on September 30, 2019. In continuous operation since 2003, the Committee provided information, advice, and recommendations to NOAA and the Department of the Interior on timely MPA matters of national significance. Comprising diverse members representing the full range of ocean stakeholders and interests, the Committee sought to provide balanced, objective analysis and consensus advice on some of the most critical and complex challenges facing MPAs today. These included: building capacity for adaptive management in the face of changing climate and ocean uses; designing ecological connectivity into MPA networks; engaging more diverse coastal communities; and creating sustainable means of financing MPA operations.

REPORTING PERIOD: AUG 31, 2019 - OCT 25, 2019

National Marine Sanctuaries Webinar Series reaches a wide audience in 2019

https://sanctuaries.noaa.gov/education/teachers/webinar-series.html

NOAA's Office of National Marine Sanctuaries aims to provide teachers with resources and training to support ocean literacy in America's classrooms. Through the National Marine Sanctuaries Webinar Series, NOAA has connected with formal and informal educators from around the globe. The Webinar Series is a virtual opportunity that provides attendees with educational resources, scientific expertise, and training to support ocean and climate literacy in the classroom. In FY19, eight distance-learning opportunities attracted 3,158 total attendees, an increase of 240% from FY18. These distance-learning opportunities have provided a platform for NOAA's Office of National Marine Sanctuaries to connect with educators, highlight partnerships and research, showcase resources found in national marine sanctuaries, and increase the accessibility of science-based learning.

2019 GIYS report outs

Participant levels approached 9,600 youth through senior citizens in 40 activities. Events included cultural demonstrations, beach cleanups (approximately 1000 pounds), kayak tours, local festivals, offshore fishing trips, ocean-themed films, and virtual reality experiences.

Better than sci-fi! Real-time seafloor exploration in National Marine Sanctuary of American Samoa

https://sanctuaries.noaa.gov/news/sep19/seafloor-exploration-national-marine-sanctuary-american-samoa.html

National marine sanctuaries are more than a fancy name on a map. They are a public recognition of the value the ocean has, not only for the services a healthy ocean provides to humans, but also for the beauty of life and inspiration that comes from it. Basic survey data help sanctuary staff better protect the biological and physical treasures under those waters. In September 2019, E/V *Nautilus*, on its first expedition to National Marine Sanctuary of American Samoa built on information from NOAA Ship *Okeanos Explorer*'s 2017 map of the area. *Nautilus*' expedition objectives were to expand that map and collect geological and biological samples to better understand the habitats here.

Hawaiian Islands Humpback Whale National Marine Sanctuary partners with Papahānaumokuākea Marine National Monument's Mokupāpapa Discovery Center to provide an outreach talk on large whale entanglement response.

Hawaiian Islands Humpback Whale National Marine Sanctuary's partnered with Papahānaumokuākea Marine National Monument's Mokupāpapa Discovery Center to provide a public talk on large whale entanglement threat and its associated response. The sanctuary leads large whale entanglement response efforts in the region and coordinates a community-based network which includes the monument. The entire effort represents a partnership working under and alongside NOAA Fisheries Marine Mammal Health and Stranding Response Program. A refresher training was conducted with network responders in Hilo on large whale entanglement response. The talk and training represented the initial efforts in preparing for response the upcoming whale season.

Whale fall actively devoured by scavengers at Davidson Seamount https://nautiluslive.org/cruise/na117

The main objectives of this expedition were to revisit and further characterize the "octopus garden," of over 1,000 brooding female octopuses (*Muusoctopus robustus*) an unexplored, deep-water region of basaltic rocky reef that resides southeast of Davidson Seamount, within the borders of Monterey Bay National Marine Sanctuary. During the final dive of this year's Nautilus expedition season, the team discovered a whale fall while exploring Davidson Seamount. The skeletal remains of the whale lying on its back are estimated to be 4-5 meters long. The team is working to identify the species, but it is

confirmed to be a baleen whale as indicated by baleen remaining along the whale's jawbones.

The shark took my fish: Foster Scholar Grace Casselberry investigates depredation in Florida Keys National Marine Sanctuary

https://sanctuaries.noaa.gov/news/oct19/foster-scholar-grace-casselberry-studies-florida-keys-hammerhead-sharks.html

For her Ph.D. in marine science and technology at the University of Massachusetts Amherst, Dr. Nancy Foster Scholar Grace Casselberry is studying a depredation phenomenon in Florida Keys National Marine Sanctuary. Her project involves tracking hammerhead sharks to figure out when and where they interact with Atlantic tarpon. This information will indicate where hammerheads take advantage of tarpon fishing in the national marine sanctuary, and help resource managers and fishing guides reduce this interaction.

Exploration in Flower Garden Banks National Marine Sanctuary with Global Foundation for Ocean Exploration

https://sanctuaries.noaa.gov/live/2019/gfoe.html

In August, NOAA's Office of National Marine Sanctuaries teamed up with Global Foundation for Ocean Exploration to explore Flower Garden Banks National Marine Sanctuary. The three-week expedition aboard sanctuary research vessel R/V *Manta* used remotely operated vehicle *Yogi* to explore the diverse marine habitats of the northwestern Gulf of Mexico. The first leg looked at genetic connectivity of sponges and corals. Leg 2 successfully documented a mass coral spawning event at East Flower Garden Bank. The team also explored spectacular high coral cover of plating star and brain corals. Leg 3 focused on black coral diversity and genetics. Each expedition was streamed live online and supported educational programs and outreach.

2019 Get Into Your Sanctuary Photo Contest Results

https://sanctuaries.noaa.gov/earthisblue/photo-contest-winners-2019.html

More than 275 photographers were submitted to this year's contest – a record number – across the categories of Sanctuary Views, Sanctuary Recreation, and Sanctuary Life. The winners will be announced on social media and will be featured in the 2020 Earth Is Blue Magazine.

Sanctuary Views

See the beautiful scenery of the National Marine Sanctuary System through visitors' eyes.



1st Place: Tiffany Duong. Molasses Reef, Florida Keys National Marine Sanctuary. Photo: Tiffany Duong

Sanctuary Life

This category depicts the amazing marine life that you can find in your national marine sanctuaries.



Ist Place: Bruce Sudweeks. Schools of fish swirl around the wreck of an old tugboat off Cape Lookout, North Carolina, near Monitor National Marine Sanctuary.

Sanctuary Recreation

National marine sanctuaries provide an idyllic setting for a variety of recreational activities. This category celebrates the people who visit them



Ist Place: Olivia Williamson. A scuba diver swims alongside a green sea turtle (Chelonia mydas) in Florida Keys National Marine Sanctuary.

National

Foundation

Marine Sanctuary

REGIONAL / NATIONAL MARINE SANCTUARY FOUNDATION NEWS

National Marine Sanctuary Foundation unveils new brand inviting people to discover wonder in national marine sanctuaries and monuments

https://marinesanctuary.org/news/national-marine-sanctuary-foundation-unveils-new-brand-inviting-people-to-discover-wonder-in-national-marine-sanctuaries-and-monuments/

The National Marine Sanctuary Foundation launched a new brand to invite people to discover the wonders of our national marine sanctuaries and marine national monuments, which are home to miraculous species, extraordinary seascapes, and cultural and maritime resources that tell our shared history. "We invite people with a stake in the health of their planet to work with us to protect their place in it," said National Marine Sanctuary Foundation President and CEO Kris Sarri.

OCNMS Online

Visit our website at: http://olympiccoast.noaa.gov/.

Follow us on Facebook and Twitter!

https://www.facebook.com/usolympiccoastgov https://twitter.com/olympiccoast Please take a few moments to peruse the site. Your feedback is greatly appreciated.

Comments and suggestions can be sent to: <u>jacqueline.laverdure@noaa.gov.</u>

Ocean-Related Websites

National Oceanic and	National Data Buoy Center	Washington's Ocean Resources
Atmospheric	http://www.ndbc.noaa.gov/r	http://www.ecy.wa.gov/programs/sea/ocean
Administration	md.shtml	/index.html
http://www.noaa.gov/		
National Ocean Service	NOAA Pacific Marine	Northwest Association of Networked
http://oceanservice.noaa	Environmental Laboratory	Ocean Observing Systems
<u>.gov/</u>	http://www.pmel.noaa.gov/	http://www.nanoos.org/
Office of National	CoastWatch – West Coast	NOAA Online Media Library
Marine Sanctuaries	Regional Node	http://sanctuaries.noaa.gov/photos
http://sanctuaries.noaa.	http://coastwatch.pfel.noaa.g	
gov/	ov/	
NOAA Ocean Explorer	NOAA Marine Debris	Encyclopedia of National Marine
http://oceanexplorer.no	Program	Sanctuaries
aa.gov/	http://marinedebris.noaa.gov/	http://www8.nos.noaa.gov/onms/park/
	_	

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_welc ome.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 – on detail

Kevin Grant – Acting Superintendent, Deputy Superintendent for Operations & Administration

George Galasso – Deputy Superintendent for Policy & Programs

Alisha Friel – NOAA Corps Officer, Vessel Operations Coordinator

Anna Hallingstad - NOAA Corps Officer, Vessel Operations Coordinator

Jenny Waddell – Research Coordinator

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

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

