



## A Report for Sanctuary Advisory Council Members Reporting Period: MAY 15 - JUL 10, 2020

#### 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 Nation.

## OLYMPIC COAST NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

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

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

#### TREATY TRUST RESPONSIBILITIES

## West Coast sanctuaries share strategies for incorporating indigenous perspectives

On May 19 and 20, staff from Olympic Coast and Channel Islands national marine sanctuaries participated in system-wide discussions aimed at further engagement and integration of tribal and indigenous perspectives into sanctuary processes, including condition reports. Though the approaches taken by the two west coast national marine sanctuaries differ, both provided valuable case studies and lessons learned that were communicated to the broader group. Discussions built on recent site experiences in an effort to provide context and present opportunities for sanctuary sites in the Pacific Islands, where vibrant indigenous cultures will heavily influence condition reporting and subsequent management planning over the next few years. The group acknowledged that ecosystem service categories and definitions used by the Office of National Marine Sanctuaries (ONMS) in many cases did not align with the unique worldviews of indigenous communities. In addition, the group noted sensitivities inherent to attempting to apply monetarybased evaluations (e.g., willingness-to-pay studies) to indigenous values held as sacred and immeasurable. Participants were actively engaged throughout the two-day meeting and were grateful for both the opportunity to discuss this topic, which is of high relevance to our sites, as well as the flexibility and determination demonstrated by ONMS Conservation Science Division staff to enhancing sanctuary assessment frameworks to address human ecosystem services and the reciprocal perspective of "human services to ecosystems."

#### COLLABORATIVE AND COORDINATED MANAGEMENT

## **Coast Guard rescues four off Cape Flattery**

Tragedy was averted when the U.S. Coast Guard successfully hoisted four survivors, one by one, onto an MH-65 helicopter. On June 16, 2020, the Coast Guard received a distress call at 10:00 PM local time. The 28-foot charter fishing boat *Gunslinger* reported that they were dead in the water and drifting towards the rocks off Cape Flattery in Olympic Coast National Marine Sanctuary. They were transiting an area locally referred to as the "gut" a periodically treacherous passage between

Tatoosh Island and Cape Flattery. The operator reported his engine died when shifting fuel tanks.



The Gunslinger crew was able to abandon ship onto a tidal bench just prior to their vessel capsizing at 10:45 PM. The Coast Guard helicopter arrived at 11:00 PM, deployed a rescue swimmer, and commenced rescue operations. A Coast Guard helicopter flight on the following day identified sheen in the water and debris from the vessel, immediately adjacent to the Cape Flattery trail observation platform on the Makah Reservation. The Coast Guard has posted a video of the night-

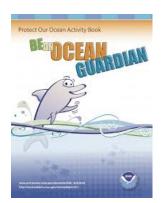
time rescue at <a href="https://www.dvidshub.net/video/756522/coast-guard-rescues-4-off-cape-flattery">https://www.dvidshub.net/video/756522/coast-guard-rescues-4-off-cape-flattery</a>.

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

Olympic Coast National Marine Sanctuary enters Phase 1 of Return to Work plan Olympic Coast National Marine Sanctuary administrative offices received approval for entering Phase 1 under NOAA's Return to Work Guidelines, after developing and receiving approval for a site specific plan to ensure staff and public safety. OCNMS staff, affiliates, and contractors attended a briefing so everyone is aware of new procedures; the majority of staff will continue to telework.

#### **IMPROVE OCEAN LITERACY**

Ocean Guardian activity books make their way to local students
Olympic Coast National Marine Sanctuary (OCNMS) education staff reached
out to individual teachers and elementary school administration staff to
support students at home with access to the Ocean Guardian Activity Book
along with other NOAA education resources. OCNMS staff worked with each
school and teacher to make sure the resources were provided in the most
accessible way to student learning space and technology. Printed copies were
mailed or delivered to the schools that wanted them, while digital copies
were provided for online classroom distribution to others. Additional NOAA
resources include easy links to the digital resources: Sanctuaries at Home;
NOAA Games; NOAA Education: Staying In? Keep learning with science
activities that kids and families can do at home; and the NOAA Live webinar series.



## Sanctuary Splash program and Big Mama go online for the first time



Olympic Coast National Marine Sanctuary AmeriCorps members conducted an educational webinar *Sanctuary Splash! Meet the Humpback Whale*, geared towards fourth through sixth grade students. During the live webinar, 26 participants learned about Olympic Coast National Marine Sanctuary while focusing on the marine mammal group cetaceans and got an introduction to humpback whales. Topics covered include humpback whale characteristics and surface behaviors, migration patterns, and the history of humpback whales. The interactive approach allowed participants to answer polls and ask questions

throughout the presentation.

### Olympic Coast National Marine Sanctuary offers Trivia BINGO for students

Olympic Coast National Marine Sanctuary education team provided a live Trivia BINGO presentation for students and teachers to explore the wonders of America's ocean and Great Lakes Treasures – our national marine sanctuaries! The fun and interactive activity brought attendees on a virtual tour through our national marine sanctuaries and then took a closer look at Olympic Coast National Marine Sanctuary. The journey included a Trivia BINGO game to engage students throughout the presentation as they explored the rich abundance of marine life that thrive in the magnificent waters of the Pacific Northwest from the rocky shores to the deep sea.

# AmeriCorps brings the Sanctuary Splash! Acoustics of Humpback Whales presentation to the local and global community

through a live webinar

Olympic Coast National Marine Sanctuary AmeriCorps members presented a live webinar on whale vocalizations, which was shared across the state and the country with students, friends, and family. They created an informative and interactive webinar about the physics of sound, the sounds that different cetaceans produce, how to produce spectrograms, and how to read and interpret spectrograms.



Participants were able to take surveys, submit questions, and even make whale sounds during the presentation.

## Olympic Coast AmeriCorps leads third annual REthink Fair with a virtual twist



Olympic Coast National Marine Sanctuary education team
AmeriCorps members hosted the third annual REthink Fair with a
video web series and "Trashed Trivia Night." Partners supporting the
2020 REthink Fair included Olympic Coast National Marine
Sanctuary, Washington CoastSavers, Clallam County Waste
Prevention Program, Hood Canal Salmon Enhancement Group, Puget
SoundKeeper, and Olympic National Park Service. The web series was
made up of short videos from each partner focused on sustainable
choices and ways to reduce the waste in our lives. Video topics

included composting, farming sustainably, recycling right, reducing microfibers, crafts, and marine debris. The REthink Series ended with a fun and engaging "Trashed Trivia Night" via GoToWebinar where 10 people attended and played trivia based on the videos they had watched.

# Teachers tune in for Ocean Guardian School Program during summer "Stay-INstitute" 2020!

Teachers participating in Nisqually River Education Program "Stay-Institute" 2020! professional development workshop learned about national marine sanctuaries and how they can apply to be in the Ocean Guardian School program. Fourteen teachers participated in two live webinar sessions led by the Olympic Coast National Marine Sanctuary education team. The Institute was provided by the Nisqually River Education Program, in partnership with South Sound GREEN, and the Chehalis Basin Education Consortium, funded by NOAA B-WET.



# Olympic Coast National Marine Sanctuary presents at Capitol Hill Ocean Week Virtual Happy Hour

Olympic Coast National Marine Sanctuary superintendent, joined Olympic Coast National Marine Sanctuary Foundation program coordinator in hosting a virtual happy hour at the completion of Capitol Hill Ocean Week. Our superintendent provided a virtual tour of Olympic Coast National Marine Sanctuary, using the theme of biodiversity, and engaged in a discussion of key issues facing the sanctuary with participants.



## Campers have fun thinking (and creating) inside the box!



Olympic Coast National Marine Sanctuary AmeriCorps members partnered with Feiro Marine Life Center to bring Junior Oceanographer camp for youth ages 10-12 online. The annual Junior Oceanographer summer camps generally bring students together to explore the beach and conduct hands on activities at Feiro Marine Life Center and Olympic Coast Discovery Center. Due to new social distancing guidelines related to COVID-19, camp was formatted to best fit an online platform, along

with fun and exciting "camp in a box" activities. Each box had all the supplies needed to finish crafts and educational activities at home. Each box also had a reusable bag with agendas, instruction sheets, activity sheets, and more for each camper. These 20 boxes were developed and picked up by parents, providing 10 campers with a fun-filled week. Campers also met with the AmeriCorps and Feiro educators online each morning for a daily check-in and presentation.

# Over 1,000 registrants for orca webinar in the National Marine Sanctuaries Webinar Series

As part of the National Marine Sanctuaries Webinar Series, 1,017 formal and informal educators, students, and families registered for the "What Orcas Teach Us: the southern residents' battle against extinction and state of our watersheds" by Seattle Times journalist Lynda Mapes. This was the largest number of registrants we have ever had since the distance learning program started in 2016. Six hundred and thirty two people attended the live presentation. 87.9% of attendees who completed the follow-up evaluation agreed that the content of the webinar made them understand that national marine sanctuaries and marine national monuments help protect the ocean and Great Lakes. 47.35% stated they plan to use this content within the next year, and 38.16% aren't sure yet. 97.59% of



attendees are "very likely" and "likely" to attend a future presentation in the National Marine Sanctuaries Webinar Series with 95.83% likely to recommend this webinar series to others.

# Olympic Coast National Marine Sanctuary members attend the 2020 Virtual Recreational Fishing Summit

Olympic Coast National Marine Sanctuary superintendent and the recreational fishing point of contact participated in the online summit for recreational fishing. Discussions with representatives from throughout the National Marine Sanctuary System focused on historical successes and future opportunities for promoting sustainable recreational fishing through partnerships which in turn can heighten support for the Office of National Marine Sanctuaries as a whole. This group hopes to be able to hold an in person summit in 2021.

#### SANCTUARY PERMITTING

#### **Issued Permits and Authorizations**

OCNMS-2018-008-A2 - John Joseph, Naval Postgraduate School

Project Title: SURTASS Settlement: Sanctuary Soundscapes

<u>Permitted Activity:</u> Deployments of subsurface moorings (SoundTrap) at the identified locations, requesting an amendment to allow for some anchor abandonment due to issues in the original configuration to retrieve anchors at deeper sites inaccessible for scuba divers. Due to sensor battery capacity, they have also requested to change the servicing interval.

<u>Project Location:</u> The proposal requests to continue to use the identified locations (Kydakabbit, near shipping lanes, Point Grenville, and Cape Alava)

Permit Duration: July 11, 2020 through December 31, 2022

<u>Comment:</u> This project is part of a national network of passive acoustics in sanctuaries with the goal of characterizing the sanctuary soundscapes. As such, work must be conducted in the sanctuary to achieve the goal of characterizing sanctuary soundscapes. This project has the support of ONMS headquarters and the west coast region, and results will be shared with sanctuary managers.

#### OCNMS-2020-003 Jesse Turner, SMRU Consulting

Project Title: Coastal Acoustic Buoys for Offshore Wind (CABOW) WA Testing

<u>Permitted Activity</u>: Requesting to deploy three acoustic monitoring buoys for two weeks to test this new monitoring equipment in real-world conditions for a project on the East Coast.

Project Location: The proposal requests to deploy off of Shi Shi/Cape Alava area.

Permit Duration: Requested start July 1, 2020 through September 30, 2020

<u>Comment:</u> Consulting firm is located on Friday Harbor and are requesting to deploy in OCNMS as it is the nearest location with oceanic conditions and water depths similar to what will be encountered on the East Coast.

## OCNMS-2020-005 Jeffery Harris, NOAA Marine Mammal Lab

<u>Project Title:</u> Aerial Surveys of Olympic Coast National Marine Sanctuary for large cetaceans (Gray and Humpback whales) using unmanned aircraft to assess body condition and behavior during a declared unusual mortality event

<u>Permitted Activity</u>: Low altitude overflights with an unmanned aerial system (APH-22) over water, within one nautical mile of the shore or offshore islands of the Washington Maritime National Wildlife Refuge Complex. Overflights of gray and humpback whales at no lower than 150 feet, in accordance with MMPA Permit #20465 are authorized.

<u>Project Location:</u> Focused large cetacean survey area: Surface to 400 feet above ground level and within the polygon defined by: one nautical mile west of the shoreline from (47° 07.75' N, 124° 11.03' W) to (48° 23.28' N, 124° 38.22' W) which covers the shoreline of the OCNMS where gray whales frequently forage.

Permit Duration: Requested start June 22, 2020 through June 21, 2025

<u>Comment:</u> This project is continuing from the 2019 unusual mortality event of gray whales.

## OCNMS-2020-006 Christopher Macon, US Army Corps of Engineers

Project Title: USACE National Coastal Mapping Program

<u>Permitted Activity</u>: The permittee is authorized to conduct low altitude overflights within OCNMS' Overflight Restriction Zone with a minimum altitude of 1,200 feet above ground/water level, to collect high resolution elevation and imagery data.

<u>Project Location:</u> This permit covers operations within the Overflight Restriction Zone of OCNMS over marine waters.

Permit Duration: Requested start July 13, 2020 through October 31, 2020

<u>Comment:</u> These collections are performed on a reoccurring basis with a target cycle of every five years.

#### **Pending Permits**

**OCNMS-2020-001** Dr. Sean Higgins, Columbia University Lamont-Doherty Earth Observatory Project Title: Illuminating the Cascadia plate boundary zone and accretionary wedge with a regional-scale ultra-long offset multi-channel seismic study

<u>Permitted Activity</u>: Deployment of six Ocean Bottom Seismometers (OBS) on the seafloor and the abandonment of 1m<sup>2</sup> iron grate anchors

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

<u>Comment</u>: This seismic survey will utilize an air gun array as a sound source, which is known to cause impacts to marine resources such as marine mammals. The National Science Foundation, as the federal funding source, is in consultation with NMFS Office of Protected Resources and seeking an Incidental Harassment Authorization (IHA) under the MMPA and a Biological Opinion (BO) under the ESA. In addition to the sanctuary permit, there will also be a consultation between OCNMS, NMFS, and NSF on the IHA and BO.

## OCNMS-2020-004 Jenny Waddell, OCNMS

<u>Project Title:</u> Invertebrate and Fish Community Species Composition and Diversity from Environmental DNA water samples in Olympic Coast National Marine Sanctuary <u>Permitted Activity:</u> Requesting to deploy moorings to collect environmental DNA samples off of Taholah and La Push, near existing OCNMS moorings.

Project Location: Near OCNMS moorings at Cape Elizabeth and Teahwhit Head.

Permit Duration: Requested start date of August 1, 2020 through October 31, 2021

Comment: Environmental DNA has been shown to be a powerful tool for species detection, which is significantly increased by coupling this sampling to high-resolution metabarcode analyses. The ability to customize metabarcode markers to capture broad taxonomic community information as well as target taxa of particular interest makes this approach remarkably versatile and allows us to characterize biological communities in ways not possible until recently. Another advantage of eDNA sampling from filtered water is that there is no impact of sampling, making it an ideal choice for sensitive and protected areas. Finally, the ability to use automated samplers like the PPS allows for the collection of fine scale, time series datasets from difficult to access areas like OCNMS at a fraction of the cost in time and money that traditional surveys would require. The proposed statistical approach using species occupancy models will enable us to distinguish the effects of

hypoxia from imperfect eDNA detection. Hypoxia and acidification are predicted to increase in the future, particularly in areas with strong upwelling as in the southern OCNMS. Understanding how biological communities respond and recover from hypoxic events is critical to be able to predict impacts on fisheries and to the coastal communities that depend on them.

#### REGIONAL/NATIONAL MARINE SANCTUARY SYSTEM NEWS

# Annual "Get Into Your Sanctuary" photo contest begins

In celebration of national <u>Get Into Your Sanctuary</u> activities, NOAA's Office of National Marine Sanctuaries is hosting its <u>annual photo contest</u>. From Memorial Day weekend to Labor Day, we are accepting the public's best photos of the National Marine Sanctuary System to help us celebrate the beauty and importance of these special places. Public engagement is critical to the success of NOAA's management of resources essential to the tourism and



recreation economy, including national marine sanctuaries. Photo contest categories include Sanctuary Views, Sanctuary Life, and responsible Sanctuary Recreation. This summer, a new category, "Sanctuaries at Home," photographs show how you can connect with a national marine sanctuary from afar, whether it be through stewardship activities in your home or neighborhood, or sanctuary related artwork, etc.

# NOAA B-WET program awards \$514,667 to Washington and Oregon organizations for environmental education

NOAA's Pacific Northwest Bay Watershed Education and Training (B-WET) program announced \$514,667 in awards to Washington and Oregon organizations to 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 under-represented 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 and ecosystem resiliency. The recipients are Discover Your Northwest (OR), Dungeness River Audubon Center (WA), Environmental Science Center (WA), Lummi Nation (WA), Mid-Columbia Fisheries Enhancement Group (WA), National Wildlife Federation (OR), Nisqually River Foundation (WA), Northwest Maritime Center (WA), and Port Townsend School District #50 (WA).

## Debut of new "webenized" condition report for CINMS Advisory Council

At the May 15, 2020 online meeting of the Channel Islands National Marine Sanctuary Advisory Council, a new web-based <u>data viewing platform</u> supporting the <u>CINMS Condition Report</u> was debuted. The "webenized" condition report, which is part of an ecosystem trends project for sanctuaries, contains updated figures, graphs, and tables, which can scale with respect to time and summarize ecosystem trends. The condition report is a static document, while the web-based version is a more interactive and routinely updated web tool.

# Hawaiian Islands Humpback Whale National Marine Sanctuary assists state of Hawaii to better understand habitat and human impacts, and at the same time, repurpose buoys that were once marine debris

Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) assisted the state of Hawai'i researchers by providing buoys that will be part of a fish-monitoring effort in and around Molokini Crater. Molokini sits within sanctuary waters and is a very important habitat for many marine animals, including, seasonally, humpback whales. The provided buoys were part of a wayward pelagic Fish Aggregating Device (FAD) used by commercial fisheries to create an ecosystem offshore that attracts commercially valuable fish for harvesting. With the industries' termination of setting seine nets on dolphins and the greater availability of transmitters for tracking, the use of FADs has increased as a viable alternative. However, and unfortunately, with its own set of risks - entanglement. HIHWNMS has been monitoring the issue and, when able with the help of its partners and the community, has been removing illegal or wayward FADs and their transmitters. This past spring a FAD transmitter provided by NOAA Fisheries to the sanctuary was used to track a large raft of marine debris for removal. In this case, the buoys that were part of the FAD's surface system were repurposed (recycled) towards better understanding the habitat that makes up part of HIHWNMS. In addition, the sanctuary's natural resource management specialist provided some advice and reviewed the moored receiving stations that the buoys would be a part of, as to reduce their own risk of entanglement.

# Papahānaumokuākea Marine National Monument scientists receive \$1 million grant for deep-sea exploration

Papahānaumokuākea Marine National Monument (PMNM) scientists and proposal principal investigators were notified that the Office of National Marine Sanctuaries will receive a \$1,000,000 grant from the National Oceanographic Partnership Program. The grant will support 33 days of deep-sea exploration aboard the Ocean Exploration Trust's vessel E/V *Nautilus*. In partnership with NOAA's Deep Sea Coral Research and Technology Program and the Oceanography Dept. of the Univ. of Hawai'i, the *Nautilus* will conduct telepresence-aided exploration of deep seamounts in PMNM's expansion area. Of particular interest are two clusters of seamounts. The linear arrangements of these two clusters suggest formation at a mid-ocean hot spot, but the orientation of their long axes suggests that they did not originate at the Hawaiian hotspot. It is hypothesized they formed in the southeast Pacific 80 million years ago during the Cretaceous period, and during subsequent years were tectonically rafted into the vicinity of the Hawaiian Archipelago. The proposed exploration will collect rock samples to confirm their age and geologic origin, and conduct biological surveys to investigate their communities and biodiversity.

# REGIONAL/NATIONAL MARINE SANCTUARY FOUNDATION NEWS Capitol Hill Ocean Week 2020

https://marinesanctuary.org/chow-2020-archive/

The National Marine Sanctuary Foundation hosted the first virtual Capitol Hill Ocean Week on June 9, 2020. It focused on a growing crisis facing our planet: the loss of biodiversity and its impacts on our communities. Ninety speakers from four continents and more than 2,500 participants from across the U.S. and around the world discussed the value of protecting biodiversity in our ocean and freshwater ecosystems and providing meaningful protection; how people, communities, governments, and businesses are working to protect and restore ecosystems and species; and the ways that science and technology are expanding our knowledge and improving management. Access the opening remarks, plenary sessions, and other virtual CHOW features.

# **OCNMS Online**

Visit our website at: <a href="http://olympiccoast.noaa.gov/">http://olympiccoast.noaa.gov/</a>.

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

Comments and suggestions can be sent to: 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 http://www.noaa.gov/	National Data Buoy Center <a href="http://www.ndbc.noaa.gov/rmd.shtm">http://www.ndbc.noaa.gov/rmd.shtm</a> <a href="http://www.ndbc.noaa.gov/rmd.shtm">l</a>	Washington's Ocean Resources <a href="http://www.ecy.wa.gov/programs/se">http://www.ecy.wa.gov/programs/se</a> <a href="mailto:a/ocean/index.html">a/ocean/index.html</a>
National Ocean Service http://oceanservice.noaa.gov/	NOAA Pacific Marine Environmental Laboratory http://www.pmel.noaa.gov/	Northwest Association of Networked Ocean Observing Systems http://www.nanoos.org/
Office of National Marine Sanctuaries http://sanctuaries.noaa.gov/	CoastWatch – West Coast Regional Node http://coastwatch.pfel.noaa.gov/	NOAA Online Media Library http://sanctuaries.noaa.gov/photos
NOAA Ocean Explorer http://oceanexplorer.noaa.gov/	NOAA Marine Debris Program http://marinedebris.noaa.gov/	Encyclopedia of National Marine Sanctuaries <a href="http://www8.nos.noaa.gov/onms/park/">http://www8.nos.noaa.gov/onms/park/</a> <a href="http://www8.nos.noaa.gov/onms/park/">L</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: <a href="http://olympiccoast.noaa.gov/">http://olympiccoast.noaa.gov/</a>.

To learn more about the sanctuary advisory council, please visit:

http://olympiccoast.noaa.gov/involved/sac/sac w elcome.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 along with 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: <a href="http://olympiccoast.noaa.gov/involved/welcome.html">http://olympiccoast.noaa.gov/involved/welcome.html</a>

#### 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

# **CONTACT INFORMATION Olympic Coast National Marine Sanctuary**

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

