

## OLYMPIC COAST NATIONAL MARINE SANCTUARY

A REPORT FOR SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: MARCH 10 – MAY 11, 2012

### **ABOUT THE SANCTUARY**

Olympic Coast National Marine Sanctuary spans 3,189 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 rich marine mammal and seabird faunas, 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 Makah, Quileute, and Hoh Indian Tribes, and Quinault Nation.

## **OFFICE REPORT**

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

Organized by Olympic Coast National Marine Sanctuary (OCNMS or sanctuary) management plan priority areas.

### **TREATY TRUST RESPONSIBILITIES**

#### **Intergovernmental Policy Council meets in Neah Bay**

The Makah Tribe hosted an Olympic Coast Intergovernmental Policy Council (IPC) meeting on May 9th in Neah Bay, Washington. The OCNMS Superintendent updated the IPC on sanctuary activities. Additional agenda items included the updating of the Memorandum of Agreement between NOAA and the IPC, plans for this summer's First Stewards Symposium (<http://www.firststewards.org/>), and an upcoming meeting of the IPC Science Panel.

## **ACHIEVE EFFECTIVE AND COORDINATED MANAGEMENT**

### **Olympic Partners Plan Future Collaborations**

OCNMS was one of eight regional partners attending Olympic Partner Meeting, organized by Olympic National Park. Representatives from Aramark, Clallam County Parks, Dungeness River Audubon Center, Joyce Museum, NatureBridge, OCNMS and Olympic National Park used the day to network, discuss upcoming anniversary events, and brainstorm future collaborations.

### **Olympic Coast and Gulf of the Farallones Sanctuaries Collaborate**

OCNMS Geographer Nancy Wright hosted Tim Reed, GIS analyst from Gulf of the Farallones National Marine Sanctuary (GFNMS), for a tour of the office and a day-long discussion about project collaborations between the two sanctuaries. Existing projects include seafloor mapping in GFNMS, an Emergency Preparedness Plan for OCNMS, and an atlas of each sanctuary to be built in GIS and Adobe software.

### **NOAA releases a Facility Strategy for Olympic Coast National Marine Sanctuary**

NOAA's Office on National Marine Sanctuaries has completed an update to OCNMS's 2002 Facilities Plan. This was a strategy documented in OCNMS' recently revised management plan. The report provided recommendation for both the administrative offices in Port Angeles and for facilities on the outer coast. Port Angeles recommendations include investigating the potential for participating in the creation of an ocean-centric campus on the Port Angeles waterfront. Outer coast recommendations include a range of options for interpretive efforts in the southern sanctuary and new or upgraded facilities and vessel support in Neah Bay and La Push. The report can be viewed at [http://olympiccoast.noaa.gov/library/docs/facilitystrategy\\_april2012.pdf](http://olympiccoast.noaa.gov/library/docs/facilitystrategy_april2012.pdf).

### **Safety Training for Sanctuary Staff**

As part of efforts to ensure safe operations, OCNMS staff participated in a 3-hour First Aid and CPR Refresher course on May 17th, learning about advances in first aid treatment that are helping to save lives. Given the remote location of many of the sanctuary's field operations, our growing volunteer program, and extensive public

contacts, this helps ensure that staff have the necessary basic training to respond in emergency situations until professional medical assistance can be provided.

### **Staff Trained for Aircraft Emergencies**

Research Coordinator Ed Bowlby and Research Protection Specialist Liam Antrim completed an aircraft water ditching and survival training. Training included classroom and pool sessions, with emphasis on hands-on submerged escape techniques in the pool. The interagency training involved staff from U.S. Fish and Wildlife, National Marine Fisheries Service, Olympic National Park, and OCNMS.

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

### **Olympic Coast National Marine Sanctuary Co-hosts Climate Change Workshop**

OCNMS and Feiro Marine Life Center co-hosted a lecture “Climate Change: Implications for the Pacific Northwest” by Nick Bond, principal research scientist with the Joint Institute for the Study of the Atmosphere and Ocean. Dr. Bond summarized the past and expected future changes in the global climate and specifically addressed the Pacific Northwest perspective, with a focus on marine ecosystems over the next 40-50 years.

### **Innovative Research Proposed on Coastal Seabird Colonies**

OCNMS Research Coordinator Ed Bowlby contacted Kevin Ryan of USFWS’s Washington Maritime National Wildlife Refuge Complex to relay that the pre-proposal to conduct drone surveys of seabird colonies along the refuge islands in OCNMS with NOAA’s unmanned aircraft system had been favorably reviewed and had been asked to be developed into a full proposal, combined with other sanctuary proposals from California and Florida. Subsequently, OCNMS learned that projects at other sanctuaries were prioritized for 2012, and OCNMS work may be considered for 2013.

### **Habitat Classification Report Completed for Five Sites in Northern Portions of Olympic Coast National Marine Sanctuary**

OCNMS Geographer Nancy Wright and mapping consultant Rick Fletcher completed the *Habitat Classification of Five Sites in Northern Olympic Coast National Marine Sanctuary (hmpr-123-2008-01)*. This report includes processed data from an R/V McArthur II sidescan survey in 2008 and the R/V Tatoosh ground truthing survey from 2010 in addition to a habitat classification using the Greene *et. al.* classification scheme.

### **A Second Nancy Foster Scholar at OCNMS**

OCNMS will be the recipient of a Nancy Foster Scholar for 2012. The Dr. Nancy Foster Scholarship Program (<http://fosterscholars.noaa.gov/aboutscholarship.html>) provides financial support for outstanding scholarship and encourages independent graduate-level research in oceanography, marine biology, or maritime archaeology, particularly by women and members of minority groups. The support includes a four-to-six week research collaboration at a NOAA facility. Katie Wrubel, a master’s degree student with Dr. Brian Tissot at his Washington State University (WSU) Benthic Ecology Lab in Vancouver, Washington, will be working with OCNMS research team using deep-sea video data collected during remotely operated vehicle surveys in 2006, 2008, 2010, and 2011. The title of Katie’s collaborative work at OCNMS is ‘Determining the effects of macro- and micro-habitat on rockfish-habitat associations within the Olympic Coast National Marine Sanctuary.’ Her main research questions are: 1) what are rockfishes associations with physical and biological structures across a range of spatial scales within the OCNMS; 2) do rockfish exhibit functional associations with megafaunal invertebrates; 3) can we create habitat suitability maps based on these associations that are useful for management.

### **Sanctuary Oceanographic Mooring Program**

Staff from OCNMS (Ed Bowlby, Patrick A’Hearn, Rick Fletcher and George Galasso) reviewed and discussed recommendations from a newly-formed OCNMS Advisory Council working group on OCNMS’ nearshore oceanographic mooring program for 2012. Dr. Jan Newton, Principal Oceanographer for University of Washington’s Applied Physics Lab and Executive Director of the Northwest Association of Networked Ocean

Observing Systems (NANOOS, a regional IOOS) will chair the working group. OCNMS was able to incorporate most working group recommendations, as balanced against logistical and equipment limitations. This SAC working group includes the IPC Science Panel and will also be providing long-term recommendations on the nearshore monitoring program once the processed data for previous years is available and reviewed.

### **Charting the Future of Citizen Science Monitoring**

Carol Bernthal, Sanctuary Superintendent, participated as an advisory board member in a two day review of the Coastal Observation and Seabird Survey Team (COASST) program. COASST is a citizen science program run by the University of Washington with support from OCNMS. The program has trained and engaged over 700 volunteers who conduct monthly surveys of beaches to collect high quality scientific data on beached (dead) birds in 5 states. By collaborating with citizens, natural resource management agencies and environmental organizations, COASST works to translate long-term monitoring into effective marine conservation solutions. COASST is seeking the advice of the advisory board in direction the program should go, including options to geographically expand to the Western Pacific or to include new topical areas beyond seabirds. The group reaffirmed the primary mission should continue to be collection of scientifically sound information that helps inform management issues.

## **IMPROVE OCEAN LITERACY**

### **Volunteers Go on Behind the Scenes Tour at the Seattle Aquarium**

OCNMS Education Specialist Heidi Pedersen escorted five OCNMS volunteers on an enriching and educational day at the Seattle Aquarium. Karen Matsumoto, Marine Science Education Director, welcomed the group, gave us education packets and introduced Seattle Aquarium Volunteer Fred Benedetti, who gave us a behind the scenes tour.

### **Science Night Inspires Students through Hands-on Activities**

OCNMS staff participated in the 4th Annual Franklin Elementary Science Night in Port Angeles, WA. Microscopes, cameras, video screens and sand samples from the sea floor and beaches around the world helped children and their families investigate OCNMS's exhibit "Secrets of the Sand". Science Night included 24 different hands-on science activities with over 50 participants volunteering their time and resources. Katie Brenkman, OCNMS staff and parent of a Franklin Elementary student, coordinated 24 hands-on science exhibits with 15 different educators and agencies including OCNMS, Washington Sea Grant, Olympic National Park, Clallam County Master Composters, Feiro Marine Life Center, Port Angeles Family Medicine, Green Crow, Franklin Elementary Educators, Port Angeles High School Educators and Science Club, US Geologic Survey, Peninsula College, Border Patrol, NatureBridge, Home Depot and AmeriCorps. Science Night provides children with hands-on inquiry based activities to give children that extra fun education outside of the classroom. Over 400 people from the community attended the event.

### **National Marine Sanctuary Foundation Staff Visit Olympic Coast to Learn About Sanctuary Education and Outreach Programs**

Education and Outreach Specialist Jacqueline Laverdure guided National Marine Sanctuary Foundation staff Allison Alexander and Caitlin Byrnes during their visit to OCNMS. Their orientation started with a tour of Feiro Marine Life Center, led by Director Deborah Moriarty. Next, they visited Olympic Coast Discovery Center and sat with staff to discuss regional education programs. On their second day, they headed to Makah Indian Reservation to experience first-hand the beauty of the sanctuary from scenic Cape Flattery. OCNMS Makah Coastal Interpreter Polly Debari escorted the group and pointed out numerous bald eagles, a sea lion, and a gray whale. The visit concluded after a memorable visit and tour of Makah Cultural and Research Center.

### **Olympic Coast National Marine Sanctuary Trains New Volunteers**

OCNMS held the first of six training sessions for new volunteers. Volunteers who complete all six sessions will be qualified to become docents and conduct outreach at Olympic Coast Discovery Center. Trainings include topics such as diversity of marine life and habitats, maritime heritage, and research in OCNMS. Sanctuary staff also gave a tour of the Olympic Coast Discovery Center to 26 volunteers in training from the Feiro Marine Life

Center. The Feiro Marine Life Center and the Olympic Coast Discovery center are a short walking distance from each other. The volunteers are familiar with each educational center, and some volunteer at both locations.

### **Learning about Social Marketing**

OCNMS Education & Outreach Specialist Jacqueline Laverdure completed Social Marketing Training by Social Marketing Services Instructor Nancy Lee sponsored by Puget Sound Partnership and University of Washington. Social Marketing is a process that applies marketing principles and techniques to influence target audience behaviors that benefit society (the environment, public health, safety and communities) as well as the target audience. OCNMS is interested in how it can creatively use social marketing on key sanctuary topics.

### **“A New Way to Learn” for Olympic Coast Intern**

Hannah McNabb, a high school student completing an internship with OCNMS, posted a blog “A New Way to Learn” for *Hands on the Land* website. She gives her readers some insight into the work she conducts including, in her words, “working with students, assisting scientists and learning as much as possible about the ocean”. Read more about her internship at <http://www.handsontheland.org/blog/166-a-new-way-to-learn.html>.

### **Olympic Coast National Marine Sanctuary Fans Reach 500**

NOAA OCNMS Facebook page reached over 500 fans this month, including fans from twenty countries. To become a fan, go to <http://www.facebook.com/usolympiccoastgov>.

### **Ocean Science Students Work with Educators and Scientists to Collect Real Data**

Students, teachers and chaperones from Simpson Elementary School, along with educators from NOAA OCNMS and Seattle Aquarium, and a shellfish and marine biologist from Quinault Indian Nation, explored tidepools and conducted field investigations and water quality testing during a three-hour *Ocean Science* field trip at Grenville Beach on Quinault Indian Reservation. Data collected by students during the beach trip are submitted to Quinault Indian Nation Natural Resources Department and Washington [NatureMapping](#) citizen science program.

### **Students Learn about Marine Debris**

OCNMS education and outreach staff presented a marine debris program to 25 Eastern Washington Tekoa elementary students, two teachers and four chaperones in a joint program with NatureBridge, an environmental education camp center located in Olympic National Park, and the Feiro Marine Life Center.

### **Partnering with Zoos and Aquariums on Climate Change Education**

ONMS staff participated in a two day conference on Communicating Climate Change hosted by the Monterey Bay Aquarium, New England Aquarium, and National Aquarium in Baltimore, Maryland. The conference brought together educators and senior leadership from zoos and aquariums and other marine conservation organizations that have been working on climate change education, as a follow up to an initial gathering in 2008 in which organizations made pledges to enact individual or organizational goals on climate change education. Presentations focused on progress made to effective messaging to aquarium and zoo visitors, as well as encouraging conservation actions and how to continue moving forward on this important topic.

## **CONSERVE NATURAL RESOURCES IN THE SANCTUARY**

### **High Compliance to Voluntary Vessel Routing Measure**

Compliance with the Area to be Avoided (ATBA) continues at a high rate in 2011. Sanctuary staff recently completed an analysis of the marine industry's compliance to the ATBA. Estimated compliance is at 98.8 percent, virtually identical to compliance in 2010. The ATBA was designated by the International Maritime Organization (IMO) in 1995 as a voluntary routing measure to protect the nationally significant natural resources of the sanctuary. The Olympic Coast ATBA, as modified in 2002, directs all vessels greater than 1,600 gross tons or those with cargoes of oil or hazardous materials to stay outside the designated ATBA. In 2013 the applicability of the ATBA will be expanded to include vessels greater than 400 gross tons. In cooperation with the Canadian and U.S. coast guards and the Marine Exchange of Puget Sound, OCNMS monitors compliance to the ATBA.

Canadian vessel traffic managers notify vessels when they are in the ATBA and non-compliant ships are sent

correspondence under the joint signature of the Puget Sound Captain of the Port and the Sanctuary Superintendent. The sanctuary partners with the Washington Department of Ecology to publish estimated compliance rates in their annual Vessel Entry and Transit (VEAT) report. The 2011 report will be available in the near future. The 2010 report can be viewed at <http://www.ecy.wa.gov/biblio/1108001.html>.

### **Sanctuary Staff Participates in Vessel Traffic Risk Assessment Briefing**

OCNMS Deputy Superintendent George Galasso attended a briefing on a recently released Army Corps of Engineers Vessel Traffic Risk Assessment (VTRA). While the primary purpose for the VTRA project is to consider accident risk to vessels docking at the British Petroleum (BP) Cherry Point dock the VTRA also developed a comprehensive maritime risk management analysis tool that includes the approaches to and passages through the San Juan Islands, Puget Sound, Haro-Strait/Boundary Pass and the Strait of Juan de Fuca. The project was funded by BP and performed by a team from George Washington University, Rensselaer Polytechnic University and Virginia Commonwealth University. OCNMS monitors regional vessel traffic management forums as a means to reduce the potential for spills within the sanctuary.

### **2012 Washington Coast Cleanup Huge Success**

Over 1400 volunteers celebrated Earth Day this year by turning out for the annual Washington Coast Cleanup. Working at beach locations along Washington's entire Pacific coast, from Cape Flattery to the Columbia River, volunteers hauled away an estimated 33 tons of plastic water bottles, household trash, lost fishing gear, and other marine debris. The coastal cleanup generated considerable media interest given the recent concerns about Japanese tsunami marine debris reaching the west coast of the United States. Many items collected, including multiple floats and buoys were suspected to have originated from the devastating March 2011 Japanese tsunami. Experts believe that the majority of the tsunami debris will show up on the Pacific Northwest coast in 2013, while more buoyant items may have already reached the area during winter 2011-2012. OCNMS staff, with assistance from Clallam County AmeriCorps, organized registration stations and coordinated volunteers at the Makah and Hoh tribal reservations and Olympic National Park's Kalaloch Beach. Volunteers gathered at afternoon barbecues, hosted by Surfriders Foundation, Grass Roots Garbage Gang, and Aramark Industries, to share stories, socialize and refuel.

### **Developing a Contingency Plan for Japan Tsunami Marine Debris Response in Washington State**

About 50 representatives from local, state, and federal agencies, Coastal Treaty Tribes, and citizen's groups attended a workshop on Japan tsunami marine debris hosted by NOAA's Marine Debris Program. Participants were tasked with outlining elements of a state-wide contingency plan for response to the anticipated increase in shoreline debris and potential hazardous materials originating from the Japan tsunami in March 2011. Breakout groups focused on 4 elements of the contingency plan – routine shoreline cleanup, response to large or hazardous materials, monitoring, and outreach. Liam Antrim, Resource Protection Specialist from OCNMS, facilitated the monitoring group. The sanctuary has coordinated volunteers who have conducted monthly monitoring of shoreline debris data for over 10 years at some sites, which will serve as a baseline for analysis of changes in rates and types of debris deposition. Based on workshop recommendations, the sanctuary will initiate a revised approach for shoreline debris monitoring consistent with NOAA's recommended methods and will work with regional partners to expand this monitoring along Washington's outer coast.

### **Shoreline Debris Monitoring Program To Track Japan Tsunami Marine Debris Landing in Washington State**

During the month of May, OCNMS will be initiating a revised shoreline debris monitoring program, which is planned as the foundation of a larger, coordinated monitoring effort for Washington State. The revised monitoring approach, following newly published NOAA Shoreline Survey Field Guide methods, will be initiated first at sites with the strongest historical data record for shoreline debris. Sanctuary volunteers have been surveying for shoreline debris since 2001, monitoring that has established the historic record or baseline against which the influx of Japan tsunami marine debris can be evaluated. The revised monitoring program will include a strengthened volunteer training process, use of NOAA's new survey methods and data categories, and addition of debris types indicative of Japan tsunami debris. In coming weeks, sanctuary staff will visit field sites to identify

monitoring locations and train volunteers in these new survey methods. It is anticipated that a state-wide monitoring program will expand through partnerships to address a broader geographic area.

### **Sanctuary Enforcement Discussed at Bi-Annual Meeting**

OCNMS Enforcement Technical Advisory Committee (TAC) held their bi-annual meeting to discuss sanctuary enforcement issues. The TAC was briefed on recent changes to OCNMS regulations including a new prohibition against discharges from cruise ships and changes to overflight regulations. The TAC is organized by NOAA Office of Law Enforcement and includes representatives of the sanctuary, U.S. Coast Guard and Washington Department of Fish and Wildlife.

### **Fishing Vessel grounds on Cape Flattery, USCG rescues crew**

The United States Coast Guard (USCG) rescued three fishermen, Wednesday May 9, after their 37-foot vessel Karanna ran aground on the Chibahdehl Rocks, inside OCNMS, approximately four miles west of Neah Bay, Washington. OCNMS was notified of the incident by Washington Department of Ecology (WDE). OCNMS was in communication with the Makah Office of Marine Affairs, WDE, the USCG, and NOAA's Office of Response and Restoration. Early goals were to salvage the vessel, and if this was not possible to boom and offload petroleum products. Due to strong winds and sea state and the location of the vessel, none of the plans were implemented. The vessel has broken up, and it is unclear if further cleanup operations are feasible.

### **Sanctuary Staff Participate in PFMC Essential Fish Habitat Review Committee**

Research Coordinator Ed Bowlby reviewed and commented on the groundfish Essential Fish Habitat (EFH) Review Committee summary documents that were going to be presented during Pacific Fishery Management Council's (PFMC) April meetings in Seattle. He subsequently remotely listened/viewed the April 5 EFH presentation and the Council's deliberations on the proposed changes of dates and deliverables.

## **UNDERSTAND THE SANCTUARY'S CULTURAL, HISTORICAL AND SOCIOECONOMIC SIGNIFICANCE**

Nothing to report.

## **SANCTUARY PERMITTING**

### Issued Permits and Approvals (since January 2012)

OCNMS-2012-001 - Ms. Jeanine Hubler, Consortium for Ocean Leadership – OOI

Project Title: Ocean Observatories Initiative - Endurance Array Glider Operations

Permitted Activity: Deployment, operation and retrieval of two autonomous underwater vehicle gliders.

Project Location: Profiles along two east-west lines running along 48.0°N and 47.0°N from as close to shore as the 20-m isobath out beyond the western offshore boundary of OCNMS.

MULTI-2012-002 - Dr. Brad Hanson, NOAA/NMFS/NW Fisheries Science Center

Project Title: Pacific *Orcinus* Distribution Survey 2012

Permitted Activity: Discharge and deposit of expendable scientific equipment, including sonobuoys, expendable bathythermographs (XBTs), and satellite tags.

Project Location: Continental slope waters from Cape Flattery, Washington to Monterey Bay, California

Project Title: Quinault Eagle Surveys

Permitted Activity: OCNMS approved a request from the Quinault Indian Nation to authorize a bald eagle nest survey conducted by helicopter and fixed-wing aircraft within the sanctuary's overflight restriction zone. The Quinault Indian Nation has been conducting bald eagle occupancy and nesting surveys since 1998. Surveys determine nest occupancy to inform seasonal restrictions on logging activities near bald eagle nests.

Project Location: Over-ocean areas adjacent to the Quinault Reservation lands.

### Pending Permit Requests

Meagan Cummings, Lamont-Doherty Earth Observatory (L-DEO), with research funding from the National Science Foundation (NSF)

Project Title: Cascadia Thrust Zone Structures

Project Brief: conduct a marine seismic survey in the northeastern Pacific Ocean in water depths ~50–3000 m off the coasts of Washington and Oregon in June–July 2012. Tools are a 36-airgun array as an energy source and a receiving system of ocean bottom seismometers (OBSs). In addition, a multibeam echosounder (MBES) and a sub-bottom profiler (SBP) will be operated continuously throughout the cruise.

Jeff Jenner, National Data Buoy Center

Project Title: Cape Elizabeth NDBC Buoy Maintenance

Project Brief: Retrieval and redeployment of the buoy for routine maintenance.

Permitted Activity: Placing a structure (mooring) on the seabed – July 2012.

Laura Jurgens, University of California Davis Bodega Marine Laboratory

Project Title: Understanding how regional climate and foundation species interact to affect temperature extremes within biological habitats

Project Brief: Biological habitats may buffer communities from extreme temperature conditions, and the relative importance of these effects may vary across latitudes. This project will establish fine-scale temperature time series in three regions on the west coast of the US, including three National Parks (Channel Islands NP, Point Reyes NP, and Olympic NP) to quantify the effects of habitat-formers in the rocky intertidal (the region between high and low tide marks) on temperature extremes across a latitudinal range. It will also examine whether there is a predictable relationship between extreme temperatures at the organism level and regional climate patterns within these habitats.

Permitted Activity: Habitat disturbance for anchoring temperature loggers.

## NEWS COVERAGE

Large amounts of possible tsunami debris found on Alaska island

<http://www.nwcn.com/home/?fId=149287345&fPath=/news/local&fDomain=10212>

Olympic Coast Discovery to train volunteers

[http://www.sequimgazette.com/news/article.exm/2012-04-25\\_community\\_news\\_briefs](http://www.sequimgazette.com/news/article.exm/2012-04-25_community_news_briefs)

Officials formulating plan for dealing with tsunami debris

<http://www.peninsuladailynews.com/article/20120423/NEWS/304239997/officials-formulating-plan-for-dealing-with-tsunami-debris>

Beach clean-up on Washington coast may turn up tsunami debris

<http://www.ktvb.com/news/regional/148443335.html>

EARTH DAY CLALLAM: Volunteers enjoy sunny day during beach cleanup

<http://www.peninsuladailynews.com/article/20120422/news/304229982/earth-day-clallam-volunteers-enjoy-sunny-day-during-beach-cleanup>

Beach clean-up on Washington coast may turn up tsunami debris

<http://www.nwcn.com/news/Massive-volunteer-beach-cleanup-today-on-Washington-coast-May-find-tsunami-debris-148374825.html>

ARAMARK Parks and Destinations Events Celebrate Earth Day and National Park Week

<http://www.justmeans.com/press-releases/ARAMARK-Parks-and-Destinations-Events-Celebrate-Earth-Day-and-National-Park-Week/8790.html>

Volunteers to tackle debris on Peninsula's Pacific Coast beaches

<http://www.peninsuladailynews.com/article/20120420/news/304209982/volunteers-to-tackle-debris-on-peninsula-8217-s-pacific-coast-beaches>

Volunteers Sought for Coast Cleanup

<http://kbkw.com/modules/news/article.php?storyid=4071>

Japanese tsunami debris on West Coast: Look here for official info

<http://www.ptleader.com/main.asp?SectionID=36&SubSectionID=55&ArticleID=31258>

Nonprofit groups to host series of Oregon coast meeting to brief residents on responding to Japanese Tsunami debris

[http://www.oregonlive.com/news-network/index.ssf/2012/04/non-profits\\_to\\_host\\_series\\_of.html](http://www.oregonlive.com/news-network/index.ssf/2012/04/non-profits_to_host_series_of.html)

5 ways to enjoy the Washington coast

<http://www.theolympian.com/2012/04/01/2053355/5-ways-to-enjoy-the-washington.html>

Dead baby killer whale was blown up

<http://edmondsbeacon.villagesoup.com/column/columnpost/dead-baby-killer-whale-was-blown-up/802074>

This Dolphin Detonation Event Was Brought to You by the U.S. Navy

<http://blog.seattlepi.com/candacewhiting/2012/03/26/this-dolphin-detonation-event-was-brought-to-you-by-the-u-s-navy/>

**WEB SITE** (<http://olympiccoast.noaa.gov/>)

**Follow the OCNMS on Facebook!**

<http://www.facebook.com/#!/usolympiccoastgov>

*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](mailto:Jacqueline.Laverdure@noaa.gov).*

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## **FUN, OCEAN RELATED WEB SITES**

**National Oceanic & Atmospheric Administration**

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

**National Ocean Service**

<http://www.nos.noaa.gov/>

**Office of National Marine Sanctuaries**

<http://www.sanctuaries.nos.noaa.gov/>

**NOAA Marine Debris Program**

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

**NOAA Online Media Library**

<http://sanctuaries.noaa.gov/photos>

**Encyclopedia of National Marine Sanctuaries**

<http://www8.nos.noaa.gov/onms/park/>

**NOAA Ocean Explorer**

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

**National Data Buoy Center**

<http://www.ndbc.noaa.gov/rmd.shtml>

**Washington's Ocean Resources**

<http://www.ecy.wa.gov/programs/sea/ocean/index.html>

**Learn More About Your Sanctuary**

The Sanctuary Office Report is produced bi-monthly by the Olympic Coast National Marine Sanctuary in conjunction with Sanctuary Advisory Council meetings. To learn more about the Sanctuary please visit our web site at: <http://www.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)

**The Office of National Marine Sanctuaries**

The Olympic Coast National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System encompassing more than 150,000 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 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. Visit the ONMS web site at: <http://www.sanctuaries.nos.noaa.gov/>

**OCNMS Staff**

**Carol Bernthal** – Superintendent

**George Galasso** – Deputy Superintendent

**Patrick A'Hearn** – Oceanography Specialist (contractor)

**Liam Antrim** – Resource Protection Specialist, Acting Advisory Council Coordinator

**Thomas Baker** – Resource Protection Specialist (recalled to active USCG duty through September 2012)

**Lauren Bennett** – Advisory Council Coordinator (acting)

**Ed Bowlby** – Research Coordinator

**Katie Brenkman** – Research Technician (contractor)

**Jennifer Bright** – Research Technician (contractor)

**Eric Evans** – IT Consultant (contractor)

**Rick Fletcher** – R/V Tatoosh Captain (contractor)

**Carey Floyd** – Graphic and Web Designer (contractor)

**Norma Klein** – Office Administrator

**Janet Lamont** – Visitor Services Specialist (contractor)

**Jacqueline Laverdure** – Education Specialist

**Heidi Pedersen** – Education Specialist (contractor)

**Robert Rountree** – Visitor Services Specialist (contractor)

**Robert Steelquist** – Education & Outreach Coordinator

**LT Nathan Witherly** – Operations Officer (NOAA Corps)

**Nancy Wright** - Geographer



**- Contact Information -**

**Olympic Coast National Marine Sanctuary**

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**Get involved!**

To learn how to get involved in the Sanctuary visit:  
<http://olympiccoast.noaa.gov/involved/welcome.html>