

A Look Ahead

In cooperation with Washington Sea Grant and the University of Washington's Climate Impact Group, Olympic Coast National Marine Sanctuary will begin developing a "climate site scenario," a projection of predicted effects of ocean chemical, temperature and sea-level changes over the next 50-100 years. The scenario will summarize vulnerabilities and relevant adaptation strategies, and inform management decisions. The scenario will be the first step in implementing a sanctuary climate action plan and will eventually lead to "Climate Smart Sanctuary" certification through the Office of National Marine Sanctuaries. Sanctuary staff will also evaluate options for establishing OCNMS as a sentinel site for climate change research and monitoring.

Olympic Coast National Marine Sanctuary Advisory Council Members

Officers

Chair: Chip Boothe
Vice Chair: Brady Scott
Secretary: Ellen Matheny

Non-Governmental Members

Citizen-at-Large: Robert Boekelheide
Alternate: Roy Morris
Education: Ellen Matheny
Alternate: Lee Whitford
Research: Dr. Terrie Klinger
Alternate: John Calambokidis
Conservation/Environmental: Jody Kennedy
Alternate: Fayette Krause
Chamber of Commerce/Tourism/Recreation: Meredith Parker
Alternate: Mike Gurling
Marine Business/Ports/Industry: John Veentjer
Alternate: Frank E. Holmes
Commercial Fishing: Joe Kawahara
Alternate: vacant

Governmental Members

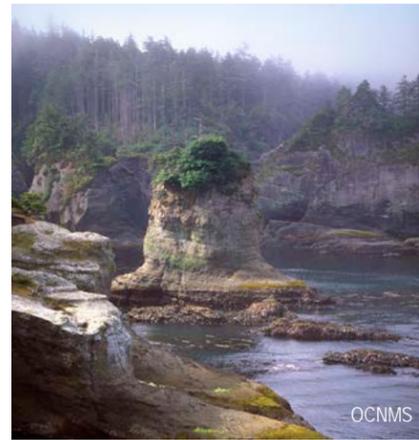
Local Government
Grays Harbor County Commissioners Office: Herb Welch
Alternates: Phil Johnson, Mike Doherty

State Government

Washington Department of Ecology: Chip Boothe
Alternates: Rebecca Post, Diane Butorac
Washington Department of Natural Resources: Brady Scott
Alternate: vacant
Washington Department of Fish and Wildlife: David Price
Alternate: Corey Niles

Tribal Government

Hoh Tribe: David Hudson
Alternate: Joe Gilbertson
Makah Tribe: Steve Joner
Alternate: Dana Sarff
Quileute Tribe: Mel Moon
Alternate: Jennifer Hagen



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Quinault Nation: Ed Johnstone
Alternate: Joe Schumacker

Federal Government (non-voting)

U.S. Coast Guard: CAPT Mike Gardiner
Alternate: CDR Scott Stewart
U.S. Navy: George Hart
Alternate: Carolyn Winters
National Park Service: Karen Gustin
Alternate: Steve Fradkin
U.S. Fish and Wildlife Service: Kevin Ryan
Alternate: vacant
NOAA National Marine Fisheries: Kevin Duffy
Alternate: Garth Griffin
Northwest Straits Commission: Ginny Broadhurst
Alternate: Caroline Gibson
NOAA Olympic Coast NMS: Carol Bernthal

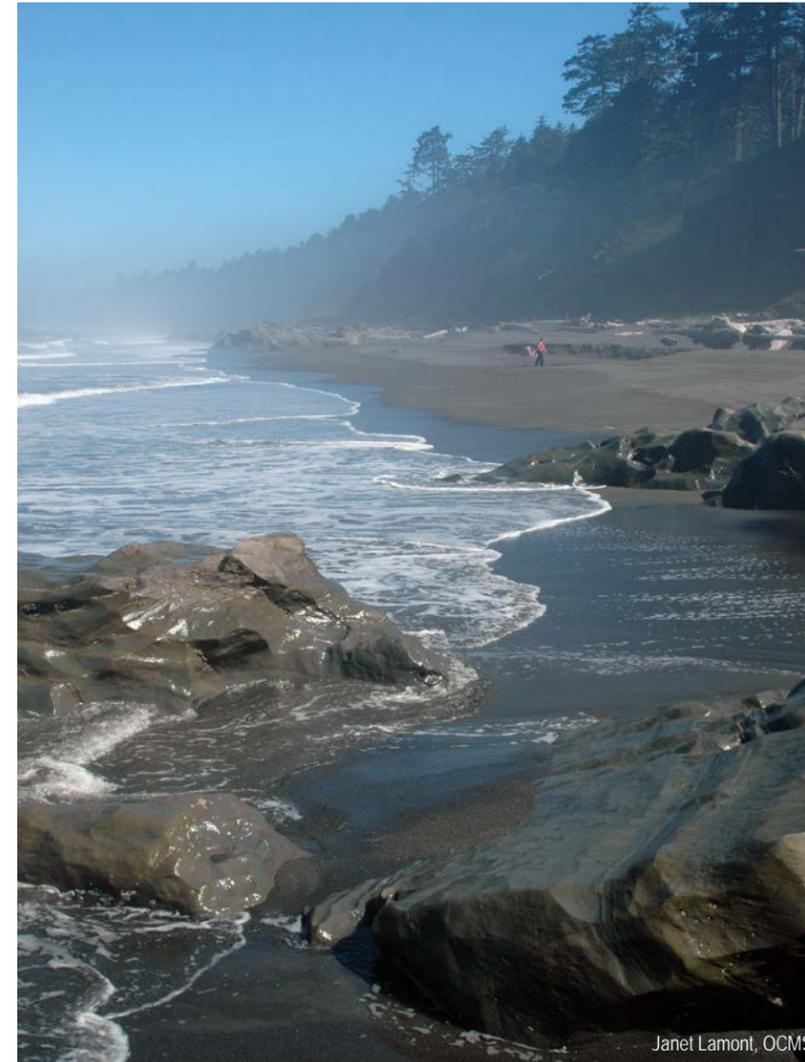
Sanctuary Advisory Council Coordinator
Liam Antrim, Tom Baker

Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration

OLYMPIC COAST NATIONAL MARINE SANCTUARY



2011 ACCOMPLISHMENTS



Janet Lamont, OCMS

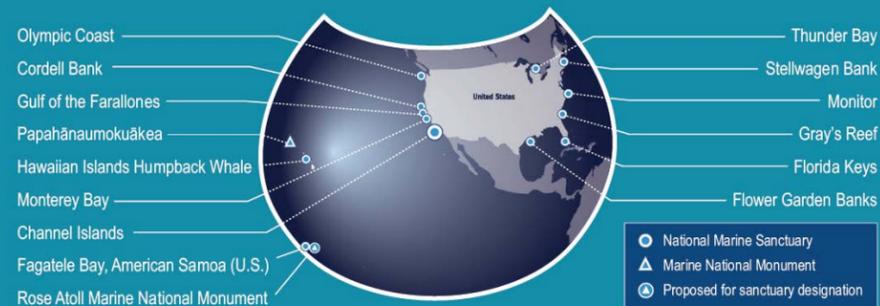


Jacqueline Laverdure, OCNMS

Olympic Coast National Marine Sanctuary spans 3,189 square miles of marine waters off the rugged Olympic Peninsula. The sanctuary is home to many marine mammals and seabirds, diverse populations of kelp and intertidal algae, and thriving invertebrate communities. The sanctuary is also rich in cultural resources, with more than 180 documented historical shipwrecks and the vibrant contemporary cultures of Makah, Quinault, Hoh and Quileute Nations. Established July 16, 1994.

<http://olympiccoast.noaa.gov>

NATIONAL MARINE SANCTUARY SYSTEM



Scale varies in this perspective. Adapted from National Geographic Maps.

NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.



John Barimo, OCNMS



Rudi Edel

Sanctuary management plan creates vision for the future

Olympic Coast National Marine Sanctuary updated its management plan in 2011; identifying priorities for the next five years, modifying several sanctuary regulations and incorporating emerging issues (such as climate change and ocean acidification) into its ongoing efforts to protect sanctuary resources. The plan also reinforced the significance of the sanctuary's trust responsibilities to the Hoh, Quileute, Makah Tribes and Quinault Indian Nation and the importance of working closely with other agencies and interest groups. Release of the plan was the culmination of over three years of effort requiring extensive public outreach and collaboration with the Sanctuary Advisory Council and the Intergovernmental Policy Council.



Liam Antrim, OCNMS

Oil spill prevention proposal clears International Maritime Organization

The International Maritime Organization (IMO) Sub-Committee on Safety of Navigation approved amendments to the Area to be Avoided (ATBA) off the Washington Coast as proposed by the U.S. delegation. The ATBA was created to prevent oil spills in Olympic Coast National Marine Sanctuary, and the proposed IMO amendments broaden the type of ships subjected to the ATBA. The ATBA has a compliance rate of over 98 percent, due in large part to a successful partnership between ONMS, the maritime industry, and United States and Canadian Coast Guards. The proposal will be reviewed by the full IMO in 2012.



Marine Mammal Institute, OSU

Seafloor mapping improves understanding of sanctuary habitats

Nearly 500 square-miles – fifteen percent – of the sanctuary was mapped in 2011, making it the most productive mapping endeavor in the sanctuary's 17-year history of seafloor mapping. Sanctuary staff obtained detailed multi-beam bathymetry imagery that reveals seafloor habitats, providing critical information to inform management decisions and help focus future research efforts within the sanctuary. The work was conducted aboard two vessels, the sanctuary's R/V *Tatoosh* and R/V *Pacific Storm*. Sanctuary staff will continue mapping efforts in prioritized areas within the sanctuary using recently acquired mapping equipment installed on the R/V *Tatoosh*.



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Coral studies inform management decisions

OCNMS staff processed hundreds of hours of video tape collected during remotely-operated-vehicle (ROV) surveys in 2006, 2008 and 2010. The team produced site characterization reports for each survey site, showing distribution and abundance of deep-sea corals and sponges, notes on fish and other invertebrates encountered, and seafloor habitat types. To date, over 14,000 coral and 20,000 sponge observations have been recorded. The finished reports will be provided to the Pacific Fishery Management Council's Essential Fish Habitat Review Committee, NOAA's Deep Sea Coral Research and Technology Program, NOAA Fisheries, the coastal treaty tribes, and other resource managers.



Michael Richlen

Understanding seabird "hotspots"

Sanctuary research staff, working with a biologist from the Nancy Foster Scholarship program, analyzed nine years-worth of data on the distribution and abundance of seabirds during summer months in the sanctuary. The data reveal patterns of use in the sanctuary and focused on four key species: Northern fulmar, Black-footed albatross, and Pink-footed and Sooty shearwaters. The project also developed a protocol to be used for future surveys. The analysis shows that seasonal abundance of migratory seabirds is linked to ocean productivity, providing important insights into changing ocean conditions.



Jacqueline Laverdure, OCNMS

Ocean Science program helps students connect with the ocean

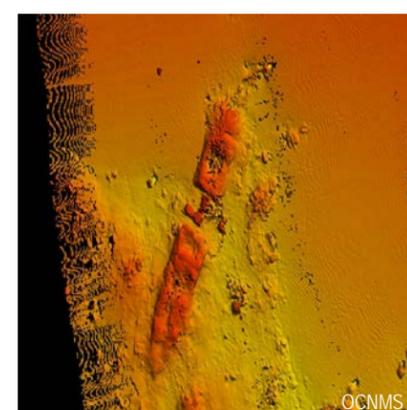
Olympic Coast National Marine Sanctuary, partnering with the Seattle Aquarium, completed its fifth year of "Ocean Science," a five-year program funded by a NOAA Ocean Literacy grant. Ocean Science was designed to integrate NOAA ocean literacy concepts and principles into formal and informal educational programs. Approximately 400 elementary school students from 11 coastal schools, 100 parents and 20 teachers participated in classroom activities and beach field investigations. Data collected by students were submitted to a citizen science program.



Janet Lamont, OCNMS

Volunteer exchange broadens understanding of maritime cultures

Olympic Coast Discovery Center volunteers and staff participated in the second part of a two-year, reciprocal exchange with volunteers from Thunder Bay National Marine Sanctuary. In 2011, the group explored the geology, economy and maritime history of the Alpena area. The visit culminated with participation in Maritime Fest, an annual event drawing over 10,000 guests to Thunder Bay NMS. As a result of the exchange, volunteers who serve in visitors centers in both sanctuaries are better equipped to explain the significance and diversity of maritime cultures in these two special places.



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Temple Bar shipwreck located

Sanctuary staff confirmed the location of the *Temple Bar* shipwreck during a habitat mapping survey conducted off the R/V *Tatoosh*. The *Temple Bar*, a 1928 steel freighter built in Glasgow, Scotland, went aground on the Quilluute Needles while traveling northbound from Tacoma, Washington towards Japan with a scrap metal cargo. The survey information will be used to protect the shipwreck and educate the public on its historical significance.