



DRAFT FISCAL YEAR 2017 OLYMPIC COAST NATIONAL MARINE SANCTUARY MANAGEMENT PLAN IMPLEMENTATION PRIORITIES

OCTOBER 24, 2016

This draft planning document is provided to Olympic Coast National Marine Sanctuary (OCNMS) Advisory Council (AC) and the Olympic Coast Intergovernmental Policy Council (IPC) to facilitate discussion and inform their advice and guidance on elements of the OCNMS Management Plan to be prioritized in fiscal year (FY) 2017. Select planned activities are included and organized by Action Plan/Strategy and summarized under the following implementation priority issues:

- A. Achieve effective collaborative and coordinated management
- B. Conduct collaborative research, assessments and monitoring to inform ecosystem-based management
- C. Improve ocean literacy
- D. Conserve natural resources in the sanctuary
- E. Understand the sanctuary's cultural, historical and socioeconomic significance

The final decision on FY 2017 activities will be based on advice and guidance from the AC and IPC, partnership opportunities, OCNMS's ongoing evaluation of management needs and staffing, and its 2017 budget allocation.

Priority Issue A: Achieve Effective Collaborative and Coordinated Management

Action Plan A1: Collaborative and Coordinated Sanctuary Management

Strategy CCM1: External Evaluation

Evaluate the contribution of OCNMS' institutional relationships to the management of resources within OCNMS.

- Develop a University of Washington School of Marine and Environmental Affairs Capstone Project Proposal, including elements of external evaluation.

Strategy CCM2: Coastal Treaty Tribes

Consult with the Coastal Treaty Tribes (Makah, Quileute and Hoh Tribes and Quinault Indian Nation) in accordance with Executive Order 13175, and partner with tribal staff members to address sanctuary projects and management issues that are of interest to the tribes.

- Continue to work with Coastal Treaty Tribes at the staff-to-staff level, with more formal consultation, as needed.
- Consult with each tribe on the OCNMS permit consultation process and the development of a Maritime Heritage Resource Management Plan.
- Look for opportunities to collaborate on education, research and resource protection initiatives.

Strategy CCM3: Intergovernmental Policy Council

Continue OCNMS' partnership with the Olympic Coast Intergovernmental Policy Council (IPC).

- Provide input to meeting agendas by providing requested information and briefings on important management issues.
- Provide staff support for meetings, including one annual meeting with the Office of National Marine Sanctuaries' (ONMS) Director and up to three additional meetings as determined by the IPC chair and membership.
- Support work related to the IPC Olympic Coast Habitat Framework initiative and help in identifying internal and external resources to implement a defined work plan.

Strategy CCM4: Washington State

Support implementation of the Washington Ocean Action Plan, the West Coast Governors Agreement on Ocean Health and other applicable state initiatives.

- Consult with Washington State Coastal Caucus and Washington State Advisory Council members on priorities for collaborative efforts, informed by recent marine spatial planning efforts. These could include, but not be limited to,

leveraging the efforts of the Washington Marine Atlas and Mapping Prioritization efforts and developing a common approach to monitoring of key ecosystem indicators.

Strategy CCM5: Department of the Interior

Enhance partnerships with Department of the Interior agencies, particularly the National Park Service, which manages Olympic National Park (ONP), and the U.S. Fish and Wildlife Service (USFWS), which manages the Washington Maritime National Wildlife Refuge Complex.

- Meet with ONP staff to identify opportunities for collaboration in FY17.
- Conduct biannually coordination meeting with ONP and USFWS.

Strategy CCM7: United States Navy

Improve collaboration and coordination with the U.S. Navy.

- Meet annually with the Navy to identify ways to share, combine and maximize resources to conduct mutually beneficial research activities.

Strategy CCM8: National Marine Fisheries Service (NMFS)

Enhance ONMS' partnership with NMFS.

- Focus efforts with NMFS on collaborative projects including ocean acidification sentinel site development, joint research projects, and engagement via OCNMS Advisory Council.
- Consult with Northwest Fisheries Science Center (NWFSC) on their sampling methodology and EFH effectiveness monitoring with OCNMS.

Action Plan A2. Community Involvement in Sanctuary Management

Strategy COM1: Advisory Council

Involve local communities in sanctuary management issues through the Advisory Council (AC) process.

- Advisory Council support will represent a major commitment of staff resources in 2017.
- OCNMS staff will provide support to implement the AC 2017 work plan.
- AC will work from the renewed Charter, effective December 2017.
- OCNMS AC Coordinator will act as West Coast Regional (WCR) AC representative.
- AC Chair will attend National Chair Summit meeting, possibly with AC Coordinator (in WCR representative role).
- Appoint new AC members as needed.
- Conduct six meetings as the budget allows.

Strategy COM2: Marine Resource Committees

Continue and expand collaborative marine stewardship efforts with Clallam, Jefferson and Grays Harbor counties.

- Participate in the North Pacific Coast Marine Resources Committee meetings and activities, with a focus on promoting research and educational opportunities on the outer coast and marine debris mitigation.
- Track Grays Harbor Marine Resources Committee meeting agendas and engage on issues of relevance to OCNMS.

Action Plan A3. Sanctuary Operations

Strategy OPS1: Vessel Infrastructure and Operations

Maintain an on-water presence in the sanctuary to ensure effective and efficient sanctuary operations, including research and education activities.

- Address any R/V *Tatoosh* deficiencies identified in the annual inspection and work to increase days at sea through expanded partnerships.
- Conduct preventative maintenance to ensure R/V *Tatoosh* remains in working order.
- Continue to pursue vessel replacement.

Strategy OPS2: Facilities

Develop new, and maintain current, infrastructure for sanctuary offices, programs, research vessels, equipment and field operations.

- Continue to work with the City of Port Angeles and Feiro Marine Life Center on the development of a Port Angeles Marine Education and Visitor's Center on the City Pier.
- Work with NOAA Real Property Division and GSA on a new lease for OCNMS space.

Strategy OPS6: Volunteer Program

Maintain and enhance OCNMS' volunteer programs in order to build connections with the community and achieve the goals and objectives of the management plan.

- Actively recruit and train volunteers for the Olympic Coast Discovery Center, Washington CoastSavers, NOAA Marine Debris monitoring and other volunteer programs.
- Conduct spring volunteer training.
- Support 1,800 volunteers and target of 20,000 volunteer hours.
- Track volunteer hours and submit quarterly summaries to the ONMS.

Strategy OPS7: Permitting and Consulting

Implement the OCNMS permitting program based on OCNMS and national program regulations, guidance and performance measures; as well as other applicable laws, regulations and agreements.

- Review permit inquiries and applications, conduct consultations, draft decision memos and issue permits, respond in a timely fashion, and maintain records in the national database.
- Participate in quarterly Permit Coordinators conference calls.
- Respond to data calls and requests to review ONMS policy documents.
- Provide briefings, as requested or if major projects are proposed, to the AC and IPC on permitting activity.
- Provide a routine briefing report on permit activity in the bi-monthly office reports provided to the AC and posted on the OCNMS website.

Strategy OPS9: Enforcement and Incident Response

Improve compliance with and enforcement of OCNMS regulations, other regulations, and voluntary programs that apply to sanctuary waters.

- Continue to work with law enforcement staff on the Law Enforcement Technical Advisory Committee (LETAC). Hold LETAC bi-annual meetings.
- Complete vessel incident report and determine if further action is warranted.

Strategy OPS10: Management Plan Implementation Reporting

Establish reporting mechanisms/process for management plan implementation and emerging issues.

- Continue annual reporting on the implementation of the management plan, including established performance measures.
- Draft the FY 2016 Management Plan Implementation Report and a FY 2017 Management Plan Implementation Priorities document and present to both the AC and IPC.
- Complete a 2011-2016 Implementation Summary Document and present to the AC.

Priority Issue B. Conduct Collaborative Research, Assessments and Monitoring to Inform Ecosystem-Based Management

Action Plan B1. Habitat Mapping and Classification

Strategy MAP1: Regional Coordination

Develop and sustain partnerships to maximize and leverage seafloor and habitat mapping resources and to promote the use of established mapping standards.

- Maintain partnerships with NOAA Line Offices, Washington and Oregon universities, and Washington State government agencies to complete mapping of Quinault and Quileute Canyon, explore additional mapping sites, and assess Washington State's Spatial Prioritization status.
- Continue to support regional efforts to map areas identified through Washington State's Spatial Prioritization Planning Workshop.

Strategy MAP2: Seafloor Habitat Mapping

Continue efforts to map seafloor habitats.

- Coordinate with the NOAA Ship *Rainier* survey within OCNMS.
- Focus on mapping priority seafloor within 3 miles of shore; survey areas contiguous with existing seafloor atlas; survey areas < 60m depth to create bathymetry, ground truth, and habitat maps.
- Continue to use the Seabat 8101 or upgrade to the Seabat 8125 with pole mount if possible.

Strategy MAP3: Habitat Classification

Integrate observations from sonar data and ground truthing to classify habitats and generate derivative maps and GIS products.

- The Washington State Seafloor Atlas V2 will include the combination of the substrate and the geomorphology, a more complex version of the seafloor. Seafloor substrate and geomorphology will be classified in NOAA's Coastal and Marine Ecological Classification Standard (CMECS).

Strategy MAP4: Mapping Products

Report and share seafloor habitat characterization data in formats useful for resource managers and the public.

- Upon approval by the IPC, the Habitat Framework 'Olympic Ecological Marine Units' will become Version 2 of the Seafloor Atlas on the OCNMS website and also migrate to other tribal and national NOAA websites, specifically IOCM's CMECS website.

Action Plan B2. Physical and Chemical Oceanography

Strategy OCEO1: Coastal Mooring Program

Continue the OCNMS water quality monitoring program to monitor key physical and chemical oceanographic parameters in coastal waters. As feasible with additional partners, expand this monitoring to include additional instrumentation (including acoustic monitoring), parameters, locations, year-round data collection, and real-time data transmission.

- OCNMS will work with partners to identify resources allowing continued monitoring in 2017 and beyond.
- Supplement mooring program in an effort to improve long-term monitoring of ocean acidification (OA) by implementing water sampling protocols to augment current mooring data per NANOOS-approved funding request

Strategy OCEO2: Hypoxia

Monitor dissolved oxygen levels and ecological impacts of hypoxic conditions (low oxygen concentration) in coastal waters.

- Continue monitoring through OCNMS moorings program and expanded sampling protocol (if hypoxia found).
- Engage with regional hypoxia collaborations and expedite communication of OCNMS findings.
- Consult with partners on data post processing.

Strategy OCEO3: Ocean Acidification (OA)

Investigate changing ocean chemistry, acoustics, and other physio-chemical changes and impacts to living organisms associated with increasing carbon dioxide levels in the atmosphere.

- Support NOAA Pacific Marine Environmental Laboratory (PMEL) algorithm development for saturation horizon modeling, including providing water samples to allow direct measurements of key OA parameters.
- Utilize NANOOS funding to precipitate new collaborations with the Washington OA Center regarding water sampling (DIC, TA, pH) to accompany mooring data.
- Continue to engage the Washington Marine Resources Advisory Council (MRAC).

Action Plan B3. Populations, Communities and Ecosystems

Strategy ECO1: Water Column Communities

Conduct and collaborate in investigations of water column communities.

- No specific activities planned for FY17. Will consider acquisition of mid-water sonar data and consider plankton community sampling for community and OA impacts analysis, as opportunities arise.

Strategy ECO2: Intertidal

Conduct and collaborate in research on the distribution and abundance of intertidal organisms.

- Complete rocky intertidal monitoring on Makah and Quinault reservations, and complete data entry into established databases.
- Evaluate continued sand beach monitoring and complete if warranted.
- Coordinate with Makah and Quinault biologists and internship programs, as opportunities arise.

Strategy ECO3: Subtidal

Characterize the habitats and biota of the nearshore subtidal zone.

- Support Year 3 of subtidal dive surveys in collaboration with NOAA/NW Fisheries Science Center and continue engagement in data analysis and survey planning.

Strategy ECO4: Benthic

Investigate the abundance and distribution of benthic organisms, both epifauna and infauna, from subtidal to deeper shelf habitats.

- In partnership with the Ocean Exploration Trust (OET), Quinault Indian Nation, and Northwest Fisheries Science Center (NWFSC), explore likely areas of biological importance in the Quinault Canyon. The planned survey will utilize OET's E/V *Nautilus* and its Remotely Operated Vehicle (ROV), and NWFSC's Autonomous Underwater Vehicle (AUV).
- Complete reporting on habitat recovery monitoring prior to 2007.
- Complete review of 2008 post-remediation video and draft preliminary report.
- Develop recommendations for future monitoring in compliance with permit requirements.

Strategy ECO6: Marine Birds

Improve characterization of spatial and temporal distribution, abundance, forage behavior and areas used by marine birds.

- Continue monthly pelagic seabird surveys from R/V *Tatoosh*.
- Continue with ad hoc support for COASST programs.

Strategy ECO7: Marine Mammals

Improve characterization of spatial and temporal distribution, abundance, forage behavior and areas for marine mammals.

- Provide field support for annual sea otter surveys.
- Update OCNMS website with focus on acoustic monitoring projects in OCNMS.

Strategy EC08: Stranding Networks

Participate in the regional marine mammal incident response networks.

- Continue support for the Northwest Marine Mammal Stranding Network, primarily to improve reporting and response to outer coast incidents.

Strategy EC09: Ecosystem Processes

Collaborate in ongoing efforts by the NOAA Northwest Fisheries Science Center (NWFSC) and others to develop and apply a comprehensive ecosystem model that identifies indicator species, trophic networks, and physical-biological coupling.

- Complete updates to Science Needs documents (see DATA3)

Action Plan B4. Data Management, Sharing and Reporting

Strategy DAT1: Data Quality Control and Management

Develop and promote data management procedures.

- In the January 2017 AC meeting, OCNMS staff will report on moorings, seafloor mapping, marine mammal and seabird studies, intertidal monitoring, citizen science, and support of OCNMS partner research, in addition to surveys by the NOAA Ship *Rainier* and E/V *Nautilus* in 2016.
- Reports from research and monitoring activities will be posted on the OCNMS webpage for public availability.

Strategy DAT2: Data Distribution

Provide easy and timely access to data collected or managed by OCNMS.

- The improved OCNMS website will include Version 2 of the Washington Seafloor Atlas and the Habitat Framework Olympic Ecological Marine Units Map and Report.

Strategy DAT3: Adaptive Management

Periodically evaluate data collection efforts by OCNMS to ensure that data are useful to OCNMS and other marine resource managers and that data needs are clear to staff and other researchers.

- Review and update OCNMS Science Needs Assessment documents.

Strategy DAT4: Condition Report

Publish an OCNMS Condition Report at a regular frequency, at a minimum prior to the next management plan review process.

- Engage in regional ecosystem indicator assessment/identification, especially in context of sanctuary Condition Reports and ocean acidification.

Priority Issue C. Improve Ocean Literacy

Action Plan C1. K-12 Education

Strategy ED1: K-12 Partnerships

Work in partnership with regional education organizations in order to leverage resources for K-12 ocean literacy programs.

- Coordinate Pacific Northwest Bay Watershed Education and Training (B-WET) Program.
- Work in partnership with regional education organizations (Feiro Marine Life Center, Seattle Aquarium, NatureBridge and Pacific Education Institute) to leverage resources for K-12 ocean literacy programs.
- Provide staff support and educational resources to Olympic Coast teachers.
- Support at least three teacher professional development workshops.

Strategy ED2: Place-Based Education

Work collaboratively with rural schools and tribal communities within the region adjacent to the sanctuary to develop place-based education opportunities for K-12 students.

- Reach approximately 1,600 students, by providing staff support and educational resources for place-based K-12 education programs, including:
 - Ocean Science;
 - Ecosystem Pen Pals;
 - North Olympic Watershed (N.O.W.) Science;
 - Ocean Guardian;
 - Remotely Operated Vehicle (R.O.V) clubs;
 - Junior Oceanographer and Marine Tech camps;
 - Hoh Tribal Watershed youth program and other tribal summer programs as requested.

Strategy ED3: Regional Initiatives

Participate actively in relevant regional education organizations and initiatives.

- Participate in relevant regional education organizations and initiatives, representing OCNMS and Pacific Northwest B-WET, as funding allows.

Strategy ED4: Technology

Employ current and emerging technologies in order to make Ocean Literacy information and curricula more accessible and provide students with a richer educational experience.

- Enhance OCNMS website to be a source of Ocean Literacy information;
- Conduct Ship-to-Shore educational programs through E/V *Nautilus* and Nautilus Live;
- Implement distant learning exchanges through Ecosystem Pen Pals Program, including online webinars, web chats and a virtual student summit connecting indigenous students from Washington, Hawaii and American Samoa.

Action Plan C2. Higher Education

Strategy HED1: Internship Development

Coordinate internship activities between local colleges, universities, community colleges and OCNMS to create learning opportunities within the areas of sanctuary operations, research, education and management.

- Pursue internship opportunities with the NOAA Hollings Scholar and NOAA Nancy Foster programs.
- Serve as NOAA mentor for at least one NOAA Hollings Scholar.
- Serve as NOAA mentor for one Washington Service Corps AmeriCorps member.
- Support UW SMEA students with Capstone project reviewing management plan implementation.

Strategy HED3: College Partnerships

Build partnerships with regional colleges, universities, foundations and other institutions in order to increase educational opportunities in ocean science, education, policy and management fields.

- Participate in local career days and job fairs as appropriate.
- Develop opportunities for students to be involved in marine science research.
- Provide continuing education opportunities for teachers to receive academic credit and gain experience in order to enhance their understanding of marine science content areas and methods for hands-on science education.
- Participate in 1- 2 college fairs.
- Work with UW School of Marine and Environmental Affairs to develop a Capstone Student Project for FY 2018.

Action Plan C3. Visitor Services

Strategy VISIT1: Visitor Experience

Actively collaborate with other agencies, tribal governments, tourism organizations and the private sector to provide services and products that contribute to high-quality educational experiences for visitors to the Olympic Peninsula.

- Work with local tourism bureaus to attract visitors and inspire stewardship.
- Operate Olympic Coast Discovery Center (OCDC) to educate visitors and visiting school groups. The planned opening from Memorial Day until Labor Day, open daily 10-5, will be dependent on funding.
- Train new volunteers to support OCDC and provide ongoing enrichment and training opportunities to current volunteers.
- Provide outreach to approximately 6,000 OCDC visitors.
- Promote and conduct Get Into Your Sanctuary activities.

Strategy VISIT2: Long-Range Interpretive Plan

Develop and implement a Long Range Interpretive Plan for OCNMS.

- Install kiosks at Kalaloch Lodge and Forks Visitor Center and look into funding for additional kiosk for Olympic Coast Discovery Center.
- Investigate funding opportunities for community outreach, including Sanctuary on Wheels and Inflatable Whale projects.

Strategy VISIT3: Using Technology

Utilize current and emerging technologies in order to educate and inform physical and virtual visitors to the Olympic Coast.

- Maintain and enhance OCNMS website, Facebook, Twitter, Google Ocean, YouTube, etc.
- Reach 350,000 annual website visits.

Action Plan C4. Community Outreach

Strategy OUT1: Stewardship and Citizen Science

Actively support marine stewardship and citizen science volunteer programs.

- Continue support for Washington CoastSavers.
- Continue support and engagement of NOAA Marine Debris volunteers for shoreline debris monitoring.
- Develop web content to describe shoreline debris monitoring and preliminary results.
- Provide local support for Coastal Observation and Seabird Survey Team (COASST) and coordinate marine debris monitoring efforts.

Strategy OUT3: Community Events

Maintain an OCNMS staff presence at community events and meetings in the sanctuary region.

- If funding and staffing levels are adequate, the sanctuary plans to support:
 - Dungeness Crab and Seafood Festival;
 - Seattle Aquarium Family Discover Science Weekend;
 - Beachcombers Fun Fair;
 - Grays Harbor Shorebird Festival;
 - Ocean and River Festival;
 - Makah Days;
- OCNMS will continue to furnish speakers for public lecture series, community meetings and other forums in order to provide up-to-date information on sanctuary research, education, policies and management activities.
- Provide speakers at six community events.
- Provide outreach at seven outreach events.

Strategy OUT4: Community-Based Efforts

Actively support the efforts of the North Pacific and Grays Harbor marine resources committees, regional watershed councils, salmon recovery teams, the Puget Sound Partnership, other community-based non-government organizations, and local and state governments in areas of marine research, education, and policy coordination.

- Support outer coast marine resource committee (MRC) opportunities for community-based education, stewardship and research programs.
- Use the OCNMS website (Calendar of Events, etc.), email listserv, social media and other media to communicate the efforts of community-based organizations working on ocean issues in the sanctuary region.
- Look into opportunities to work with MRCs to provide community outreach (climate change initiatives) and programming for schools (water bottle filling stations, teacher workshops, etc.).

Priority Issue D. Conserve Natural Resources in the Sanctuary

Action Plan D1. Spills Prevention, Preparedness, Response and Restoration

Strategy SPILL1: Area to be Avoided Compliance and Monitoring

Sustain or improve the maritime industry's compliance with the Area to be Avoided (ATBA).

- Identify vessels in the ATBA that are non-compliant with International Maritime Organization's recommendations and conduct outreach seeking voluntary compliance.
- Report on ATBA compliance for the 2016 calendar year and publish report on the OCNMS website.

Strategy SPILL3: Regional Planning and Training Exercises

Promote improved spill preparedness and response through OCNMS participation in training exercises and regional oil spill planning activities.

- Promote improved spill response preparedness of OCNMS staff through participation in training exercises and regional oil spill planning activities.
- Participate in the Northwest Area Contingency Plan's Annual Summit.

Strategy SPILL5: OCNMS Organizational Response Plan

Develop policies, tools and procedures for OCNMS staff and resource mobilization, OCNMS integration into an Incident Command Structure, and effective consultation on emergency response actions.

- Update the OCNMS incident response plan (IRP), with 2017 training recommendations.
- Plan and conduct IRP training.

Action Plan D2. Climate Change

Strategy CLIM1: Climate Smart Sanctuaries Program

Participate in the Office of National Marine Sanctuaries (ONMS) Climate-Smart Sanctuaries program in order to become certified as a climate-smart sanctuary.

- Engage in Office of National Marine Sanctuary revisions to the Climate Smart Certification process.
- Continue to pursue Climate Smart Certification as the revised standards become finalized.
- Ensure information compiled for Climate Smart Sanctuary certification is widely distributed to OCNMS partners and the public.

Strategy CLIM2: Sanctuary as Sentinel Site

Work to establish OCNMS as a sentinel site for long-term climate change research and monitoring in the Pacific Northwest.

- Follow up on OASeS Workshop including:
 - Develop workshop report;
 - Coordinate collective participation in Federal Funding Opportunity on Regional Vulnerability Assessments for Ocean Acidification;
 - Begin collaborative process to determine governance structure, and;
 - Develop a Joint Research Plan, for the Sentinel Site.
- Continue to engage the SAC Working group on OA.

Strategy CLIM3: Resilient Ecosystems

Work with natural resource managers and local communities on the Olympic Peninsula to improve the resiliency of ecosystems in the face of climate change impacts.

- Participate in a workshop to utilize the Commission on Environmental Cooperation's rapid vulnerability assessment tool to identify climate-driven and other threats to marine protected areas and to evaluate the adaptation potential of selected habitats. Produce report based upon the outcomes of the workshop.
- Report workshop results to the SAC.
- Determine what climate-related work (e.g., vulnerability studies, adaptation strategy development, coastal resilience, etc.) has been done, is currently on going, or is planned for coastal and marine areas in or near the sanctuary.

Strategy CLIM4: Communicating Climate Change

Communicate information about climate change and its potential effects on the sanctuary and Washington's Outer Coast to OCNMS partners and the public.

- Provide local communities and the public with information about potential climate change impacts on the Olympic Coast and efforts to plan for climate change.
- Develop OA/climate change outreach materials including placemats and Olympic Coast Discovery Center display, if funding is available.

Action Plan D3. Marine Debris

Strategy MD1: Submerged or Floating Debris

Identify, locate and remove lost or abandoned submerged or floating marine debris.

- Continue support for derelict fishing gear and other submerged debris removal/mitigation.

Strategy MD2: Beach Debris

Mitigate impacts of marine debris on coastal beaches.

- Work with regional partners to remove, monitor and respond to routine shoreline debris.
- Support CoastSavers cleanup events with registration site coordination and planning assistance.
- Promote regional efforts to address debris from remote areas.
- Continue coordination of NOAA Marine Debris Program volunteers on shoreline debris monitoring, including entry of data into NOAA's database, analysis of local findings, and outreach (e.g., via web, volunteer messaging).

Action Plan D4. Wildlife Disturbance

Strategy WD2: Wildlife Restriction Zone

Support and improve recognition of and compliance with the existing OCNMS wildlife disturbance mitigation (overflight restriction) zone.

- Train ONP rangers on reporting observations of low flying aircraft.
- Distribute OCNMS Overflight Poster to Western Washington State Airports.
- Participate in ONMS discussions about impacts of small UAS/drones to wildlife and possible management actions.

Action Plan D6. Habitat Protection

Strategy HP1: Threat Assessment and Mitigation

Assess existing and potential natural and human-caused threats to physical and biogenic marine habitats (e.g., deep sea corals and sponge, kelp and other macroalgae), and collaboratively develop appropriate management measures to protect and conserve physical and biological habitats.

- Complete analysis and reporting on habitat disturbance and recovery surveys on Pacific Crossing submarine cables completed prior to 2007.
- Complete review of 2008 post-remediation video for biological data and draft preliminary report of survey findings.

Strategy HP2: Habitats of Special Importance

Develop criteria to identify habitats of special importance. Collaborate with co-managers to identify and implement management measures necessary for protection of habitats of special importance.

- Continue support for the IPC Habitat Framework, which is a broad geographical application of Coastal and Marine Ecosystem Classification System to the outer coast of Washington using existing data.

Action Plan D7. Regional Ocean Planning

Strategy ROP1: Regional Ocean Planning

Investigate how recent initiatives in marine spatial planning can improve sanctuary management by participating in regional ocean planning processes.

- Continue to monitor and support the Washington State marine spatial planning efforts.
- Review finalized ecosystem indicators and evaluate their applicability to future OCNMS condition reports.

Priority Issue E. Understand the Sanctuary's Cultural, Historical and Socioeconomic Significance

Action Plan E1. Maritime Heritage

Strategy MH1: Cultural Resource Conservation

Work collaboratively to locate, inventory, assess, interpret and protect cultural resources in the sanctuary, and develop further the cultural resource components of OCNMS's permitting and compliance program.

- Share a draft of the OCNMS Maritime Heritage Resource Management Plan with Washington Department of Archaeology and Historic Preservation (DAHP), Tribal Historic Preservation Officers, Tribal Cultural Resource staff and the National Park Service. Based on feedback, complete the document.
- Seek a platform of opportunity to document the material condition of the USS *Bugara*, a World War II era submarine lost off Cape Flattery in 1971.

Strategy MH3: Public Understanding Treaty Rights

Work collaboratively with the Coastal Treaty Tribes to improve the public's understanding of treaty rights and how traditional lifeways form a vital connection between the past, the present and the future, with a focus on marine areas.

- Look for opportunities to incorporate the importance of treaty rights into OCNMS presentations.
- Train new staff and volunteers in the importance of treaty rights and OCNMS's treaty trust responsibilities.

Action Plan E2. Socioeconomic Values of Resources in the Sanctuary

Strategy SV2: New Socioeconomic Information

Develop partnerships in order to collect, assemble, and analyze new information about human uses or activities occurring in the sanctuary and their socioeconomic values.

- Publish the 2015 NOAA/ONMS/NCCOS research on Socioeconomic Profiles of Users and Economic value of Coastal Recreation Uses and make it available on the ONMS socioeconomic web page.