

# ***Draft Fiscal Year 2015 Olympic Coast National Marine Sanctuary Management Plan Implementation Priorities***

**October 22, 2014**

This draft planning document is provided to Olympic Coast National Marine Sanctuary (OCNMS) Advisory Council (AC) and the Olympic Coast Intergovernmental 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) 2015. 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 2015 activities will be based on advice and guidance from the AC and IPC, partnership opportunities, and OCNMS's ongoing evaluation of management needs and staffing, and its 2015 budget allocation.



## **Priority Issue A: Achieve Effective Collaborative and Coordinated Management**

### *Action Plan A1: Collaborative and Coordinated Sanctuary Management*

#### **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.
- Continue to improve the frequency and substance of communications.
- Conduct tribal staff briefings and tribal consultations as appropriate.
- Consult with each tribe on the OCNMS permit consultation process.

#### **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 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.

#### **Strategy CCM4: Washington State**

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

- Track work of the Washington Coastal Marine Advisory Council and Washington Marine Resources Advisory Council.
- Actively support Washington State marine spatial planning and ocean acidification efforts.

#### **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.

- Serve as a cooperating agency in the development of an Olympic National Park Wilderness Stewardship Plan and Environmental Impact Statement.
- Meet to discuss areas of FY15 collaboration.
- Provide training to ONP coastal interpreters.
- Collaborate on initiatives of common interest, such as marine debris removal.

## ***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.

- Commit staff resources to support the AC in 2015.
- Provide support to implement the AC 2015 work plan.
- Appoint new AC members as needed; conduct 6 AC 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.
- Troubleshoot habitat mapping equipment ensuring the habitat mapping efforts will successfully continue and quality data is collected in FY15.

### **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 Campus.
- Work with partners to further articulate space and design requirements for a marine campus, and continue to develop options for moving forward on leasing space.
- Support a fiscal analysis of shared marine education facility on the City Pier.

### **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, Coastal Observation and Seabird Survey Team, marine debris monitoring and other volunteer programs.
- Track volunteer hours and submit quarterly summaries to Office of National Marine Sanctuaries (ONMS).
- Develop an OCNMS site-specific volunteer handbook.

### **Strategy OPS9: Enforcement and Incident Response**

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

- OCNMS will continue to work with law enforcement staff on the Technical Advisory Committee (TAC). Hold TAC bi-annual meetings.
- Update the OCNMS Incident Database.
- Conduct an analysis of vessels abandoned in OCNMS since designation. Review findings and forward recommendations to the OCNMS Superintendent.

### **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 2014 Management Plan Implementation Report and a FY 2015 Management Plan Implementation document and present to both the AC and IPC.

## **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.

- Participate in 2015 Washington State Spatial Prioritization Workshop.

#### **Strategy MAP2: Seafloor Habitat Mapping**

Continue efforts to map seafloor habitats.

- Investigate opportunities for collaborative mapping with Washington State and the NOAA Pacific Hydrographic Branch.
- Subject to funding and availability of equipment, continue to collect sonar and ground-truth data, focusing on coastal areas less than 60 m deep, from Quillayute Needles to Hoh Head.

#### **Strategy MAP3: Habitat Classification**

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

- In 2015, a Seafloor Atlas of sonar data mapped by OCNMS from 2000-2013 will be produced under contract with Oregon State University, Active Tectonics and Seafloor Mapping Lab. The Atlas will include the Greene et al. (1999) seafloor habitat classification based on available ground-truth data.

#### **Strategy MAP4: Mapping Products**

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

- The Seafloor Atlas will be a fully interpreted, classified and attributed web-based mapping product that provides managers and the public with scalable and downloadable access to the known, mapped seafloor. It will be a tool for future mapping progress with additional utility for marine spatial planning and other management initiatives.

## ***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.

- At current funding projections, OCNMS anticipates implementing a scaled-down mooring program with 10 moorings instead of 13.
- OCNMS will work with partners to identify additional resources to ensure continued water quality monitoring.
- Collaborate with partners in speeding up post-processing of data for web distribution.
- Develop oceanographic mooring scenarios detailing the location and instrumentation desired (by OCNMS and partners) if budget allows for 4, 7, 10, or 15 moorings, including any ocean acidification specific instrumentation.
- Consult with the Northwest Association of Networked Ocean Observing Systems (NANOOS) on data post-processing.

### **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 is found).
- Engage in regional hypoxia collaborations, and expedite communication of OCNMS findings.

### **Strategy OCEO3: Ocean Acidification**

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 algorithm development for aragonite saturation horizon modeling.
- Seek collaborations with the Washington Ocean Acidification Center.

## ***Action Plan B3. Populations, Communities and Ecosystems***

### **Strategy ECO1: Water Column Communities**

Conduct and collaborate in investigations of water column communities.

- Continue support for Olympic Region Harmful Algal Bloom (ORHAB) program through water sampling and other tasks integrated into vessel operations.
- Seek opportunities to support and enhance research focused on water column communities.

### **Strategy ECO2: Intertidal**

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

- Continue to monitor rocky intertidal sites in cooperation with the Makah Tribe and Quinault Nation following Multi-Agency Rocky Intertidal Network protocols for rocky sites and Olympic National Park (ONP) protocols for sand sites to complement regional monitoring.
- Conduct rocky and sand intertidal monitoring at four sites. Complete data entry into established databases.
- Improve OCNMS web entries by creating a web page containing program information and summary of findings.

### **Strategy ECO4: Benthic**

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

- Conduct work on the PC-1 submarine cable habitat and benthic community analysis. (See entry under Strategy HP1 for more details.)
- Promote additional analysis of OCNMS video for benthic biological community characterization.

### **Strategy ECO6: Marine Birds**

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

- Collaborate with WDFW and others to implement winter and offshore seabird survey efforts, with support from Wiancko grant funds.
- Support a second annual meeting of the ad-hoc coastal seabird group.

### **Strategy ECO8: Stranding Networks**

Participate in the regional marine mammal incident response networks.

- Work with partners to improve response to stranded and dead marine mammals along the sanctuary shoreline, and to improve timely reporting to the Northwest Marine Mammal Stranding Network.

### **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.

- Evaluate ecosystem indicators developed for Washington's marine spatial planning process for relevance to OCNMS.
- Collaborate with NOAA NWFSC to identify initiatives and opportunities associated with indicators identification.

### ***Action Plan B4. Data Management, Sharing and Reporting***

#### **Strategy DAT1: Data Quality Control and Management**

Develop and promote data management procedures.

- By spring 2015, collect, analyze, summarize, compile and share field reports from OCNMS' 2014 work. These reports may include moorings, seafloor mapping, marine mammal and seabird studies, intertidal monitoring, and citizen science.
- Review GIS data library holdings to update metadata and comply with NOAA Enterprise License Agreement software and license standards.

#### **Strategy DAT2: Data Distribution**

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

- Update the existing Research and Monitoring database.
- Post data for 2014 on the OCNMS Web page.
- Based on staff time availability, post years prior to 2010.

#### **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 the OCNMS Science Needs Assessment documents. NOAA's Office of National Marine Sanctuaries (ONMS) describes science needs assessment as an evaluation of the science and information requirements defined by the management issues facing each sanctuary. OCNMS currently has eight science needs documents, seven of which were drafted in May 2010 and will be updated in 2015.

#### **Strategy DAT4: Condition Report**

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

- Review ecosystem indicators developed through Washington's Marine Spatial Planning process and identify linkages to condition report questions.
- Continue work with Advisory Council members to identify references and data sets related to condition report questions and indicators.

## **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.

- Support Pacific Northwest Bay Watershed Education and Training (B-WET) Program.
- Work in partnership with regional education organizations (Feiro Marine Life Center, Seattle Aquarium and Pacific Education Institute) to leverage resources for K-12 ocean literacy programs.
- Provide educational resources and support to outer coast teachers. Support at least one teacher workshop.

#### **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.

- Support Ocean Science, North Olympic Watershed (N.O.W.) Science and Junior Oceanographer programs.
- Provide staff support for Ocean Science and N.O.W. student field trips and youth summer camp programs reaching approximately 1400 students.

#### **Strategy ED3: Regional Initiatives**

Participate actively in relevant regional education organizations and initiatives.

- If funding and staffing levels are adequate, the sanctuary plans to participate in relevant regional education organizations and initiatives, representing OCNMS and Pacific Northwest B-WET.

### ***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 Nancy Foster Scholar interested in sea otter research.
- Serve as NOAA mentor for at least one NOAA Hollings Scholar.

### 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.

### *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.

#### Strategy VISIT2: Long-Range Interpretive Plan

Develop and implement a Long Range Interpretive Plan for OCNMS.

- Work collaboratively to identify opportunities to develop and install additional signage and exhibits in sanctuary region.
- Explore Sanctuary on Wheels concept for use around OCNMS region, and as a prototype for other sanctuaries.

#### 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's online presence via the OCNMS website, Facebook, Google Ocean, YouTube, and other media.

### *Action Plan C4. Community Outreach*

#### Strategy OUT1: Stewardship and Citizen Science

Actively support marine stewardship and citizen science volunteer programs.

- Continue support for Coastal Observation and Seabird Survey Team (COASST) through provision of office space and collaboration to evaluate COASST marine debris methods under development.
- Continue engagement of volunteers for shoreline debris monitoring.

- Continue development of web content to describe shoreline debris monitoring and preliminary results.
- Evaluate adaptation and implementation of Puget Sound Seabird Survey techniques to the outer coast.

### **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 the Beachcombers Fun Fair, Grays Harbor Shorebird Festival, Makah Days, Dungeness Crab and Seafood Festival, and the Ocean and River Resources Fair.
- 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, with plans to attend six such community events in 2015.

### **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 opportunities for community-based education, stewardship and research programs.
- Use the OCNMS website (Calendar of Events, etc.), e-mail listserv, social media and other media to communicate the efforts of community-based organizations working on ocean issues in the sanctuary region.

## **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 2014 calendar year and publish report on the OCNMS website.
- Participate in ONMS initiative to better utilize Automatic Identification System (AIS) vessel data to support resource protection efforts.

#### **Strategy SPILL2: Regional Vessel Management Forums**

Work within regional vessel management forums to analyze and reduce risks and hazards.

- Track the development of the Washington Department of Ecology 2014 Marine and Rail Oil Transportation Study and evaluate for implications to marine safety and oil spill risk in the sanctuary.

#### **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.
- Attend annual Northwest Area Contingency Plan Summit.
- Continue to monitor planning activities of most relevance to sanctuary interests.

#### **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.

- Complete OCNMS Organizational Response Plan and develop a timeline for updates.
- Train staff on the use of the Organizational Response Plan and the use of the Pacific Northwest Emergency Response Management Application for incident responses.

## ***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.

- Work with IPC and OCNMS Advisory Council (AC) to review the Climate Change Action Plan (revise as necessary).
- Continue working towards obtaining Climate-Smart Sanctuary certification IV and V (brief AC/working groups and complete climate action plan, respectively), including ensuring outreach and education functions are in place.

### **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.

- Collaborate with Education/Outreach staff to develop a document for the general public summarizing findings of the OCNMS Climate Change Site Scenario.
- Work with ONMS on sentinel site web content for OCNMS.
- Evaluate ecosystem indicators developed for Washington's marine spatial planning process for relevance to OCNMS; identify initiatives and opportunities associated with indicators identification.
- Pursue opportunities to promote OCNMS as a sentinel site for climate change-related research and monitoring.

### **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.

## ***Action Plan D3. Marine Debris***

### **Strategy MD1: Submerged or Floating Debris**

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

- Support regional efforts to locate and remove submerged or floating debris, primarily through permitting appropriate projects, identification of funding opportunities, reporting by OCNMS field staff, and encouragement of collaborations.
- Update the OCNMS Incident Database and conduct an analysis of vessels that have been abandoned in OCNMS since designation. See OPS9.
- Review findings and forward recommendations to the OCNMS Superintendent.

## Strategy MD2: Beach Debris

Mitigate impacts of marine debris on coastal beaches.

- Work with federal, state, tribal and other partners to remove, monitor and respond to routine shoreline debris and Japanese tsunami marine debris.
- Support CoastSavers cleanup events with registration site coordination and planning assistance.
- Promote regional efforts to address debris from remote areas.
- Continue 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 WD3: Marine Mammal Disturbance

Assess the potential for and occurrence of marine mammal disturbance and injury from human activities.

- Review and support ongoing and planned efforts within OCNMS to characterize marine mammal distribution, monitoring of marine traffic and acoustic research.
- Identify opportunities to collaborate in the areas of acoustic environment characterization and ship strike risk.

## *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 and preliminary reporting of survey findings.
- Begin consultation and planning efforts for 2016 monitoring.

### 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 NCCOS, Cascadia Research Collective and San Francisco State University work to identify seabird and marine mammal hotspots and analysis of interactions with human activities (e.g., large vessel traffic).
- Support IPC Olympic Coast Habitat Framework initiative. See CCM3.

### Strategy HP3: Invasive Species

Reduce the potential for introduction of invasive species in the sanctuary region, monitor distributions of known invasive species, and support programs to mitigate impacts of invasive species to natural and cultural resources.

- Support WDFW Aquatic Invasive Species program to sample biofouling and mitigate potential introductions from Japan tsunami marine debris.

### *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.

- Collaborate with Washington State on marine spatial planning efforts including, but not limited to, seafloor mapping, identification of ecosystem and socioeconomic indicators and characterizations of coastal activities and resources.
- Coordinate approach to develop ecosystem and socioeconomic indicators.

## **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.

- Draft an OCNMS Cultural Resource Management Plan outline and consult with partners on content. Initial plan is to include the historical context of the sanctuary, a maritime heritage resource inventory, summary of applicable laws and regulations, and permit and consultation procedures.
- Consult with the Washington Department of Archaeology and Historic Preservation on the development of a programmatic agreement describing the way in which routine OCNMS activities will comply with Section 106 of the National Historic Preservation Act.

### *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.

- Conduct two NOAA studies planned for 2015. National Centers for Coastal Ocean Science (NCCOS) and ONMS staff have coordinated additional work on non-market values to support the Washington State non-consumptive recreational use study. The Washington State study focuses on non-consumptive recreation and obtains information on spatial use by activity, spending, and socio-demographic profiles from state residents that use the outer coast with the ability to estimate how much of the activity takes place in OCNMS. The related NCCOS study focuses on the same population and obtains spatial use by activity, socio-demographic profiles and non-market economic values and how those values change with changes in natural resource attribute conditions. In addition, NCCOS is mapping the natural resource attributes. The second NOAA study Mapping Social Values is contingent on NCCOS funding and possible partnerships with the State of Washington and Coastal Treaty Tribes. ONMS and NCCOS are developing a plan with the goal of implementing the survey in the summer of 2015.