



# OLYMPIC COAST NATIONAL MARINE SANCTUARY

## *Navigating the Future*

### *Management Plan Review*



Report to the Olympic Coast National Marine Sanctuary's Advisory Council  
from the  
Spill Prevention, Preparedness, Response, and Restoration Working Group  
*Submitted to the OCNMS Advisory Council on  
22 January 2010*

In July 2009, the Olympic Coast National Marine Sanctuary's Advisory Council established a working group to develop ideas for management priorities associated with spill prevention, preparedness, response and restoration. The working group co-chairs were Bob Bohlman and Chip Boothe, and staff leads were Robert Pavia and Liam Antrim. Between August and October, the working group met three times in person or via conference call to discuss preliminary ideas for spills-related management priorities, then divided into three self-selected subgroups: Prevention, Preparedness and Response, and Restoration. Between October and December, each subgroup refined recommendations, then in December 2009 all draft products were provided to the entire working group for final review. Participants in the larger working group and subgroups (including subgroup leads and conference call participants) are summarized at the end of this document.

The following recommended strategies and supporting activities were developed through these discussions.

### **PREVENTION**

**STRATEGY #PREV1:** Sustain or improve the maritime industry's compliance with the Area to be Avoided (ATBA)

**Background:** The ATBA is an IMO-adopted voluntary routing measure off Washington's northwest coast intended to reduce the risk of vessel incidents and associated vessel spills within the Sanctuary and adjacent areas. Currently, the ATBA applies to ships, tankers and tug-barge combinations carrying oil or hazardous materials as cargo, as well as ships 1,600 gross tons and above solely in transit because they can carry large fuel loads. Through monitoring, vessels that transit through the ATBA are identified and targeted for outreach aimed at improving compliance. Likewise, publishing ATBA information in various sources serves to educate the public and maritime industry about this preventive measure. Compliance with this voluntary ATBA has steadily

improved since its establishment in 1995 and currently is near 99%. OCNMS efforts to support ATBA monitoring and compliance should be sustained, and risks posed by “unladen” vessels and barges, and other classes vessels should be analyzed.

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*Protection of marine, cultural, and shoreline resources from the impacts of an oil or hazardous materials spill from a vessel*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Monitor compliance with the ATBA by conducting monthly processing of radar data from the jointly operated Canada/U. S. Cooperative Vessel Traffic System (CVTS), augmented with Marine Exchange of Puget Sound Automated Identification System (AIS) data. Work with USCG Vessel Traffic Service Puget Sound, Canadian Coast Guard Marine Communications and Traffic Services (MCTS), and Marine Exchange of Puget Sound to analyze vessel traffic patterns and to track and identify the type and status of vessels that travel within the ATBA to allow an evaluation of risks associated with all vessels transiting the ATBA.

**ACTIVITY B:** For areas outside of the CVTS radar coverage, acquire and review AIS plots/data from U.S. Coast Guard (USCG) Vessel Traffic Service (VTS) Puget Sound and Marine Exchange of Puget Sound for tracking and identifying vessels traveling within the ATBA.

**ACTIVITY C:** Conduct directed outreach to non-compliant vessels. Send letters that appeal for ATBA compliance jointly signed by the OCNMS Superintendent and U.S. Coast Guard Captain of the Port.

**ACTIVITY D:** Work with USCG and NOAA Office of Coast Survey to include and maintain ATBA information in the CVTS Users manual published by USCG VTS Puget Sound and the Coast Pilot #7 published by NOAA.

**ACTIVITY E:** Promote and facilitate reporting of ATBA compliance statistics and analysis in publication(s) distributed to vessel traffic and oil spill prevention interests.

**ACTIVITY F:** Provide compliance data to Washington Department of Ecology (WDOE) for inclusion within their annual Vessel Entry and Transit (VEAT) Report.

**Activity G:** Maintain the OCNMS website with current ATBA background and compliance information.

**PARTNERS:**

- United States Coast Guard, Sector Seattle

- Canadian Coast Guard Marine Communications and Traffic Services Tofino
- Marine Exchange of Puget Sound
- Washington Department of Ecology
- Puget Sound Harbor Safety Committee
- Lower Columbia Region Harbor Safety Committee

**RESOURCES:**

- Access to the Canadian Coast Guard MCTS radar data for vessel traffic off the outer Washington coast and western Strait of Juan de Fuca.
- AIS data from USCG VTS Puget Sound and the Marine Exchange of Puget Sound
- Staff proficient with geographic information system (GIS) software and OCNMS data processing routines and database(s)
- OCNMS program manager and staff time
- Payment of an annual GIS license
- Payment of annual subscription to Marine Exchange of Puget Sound
- Maintenance of appropriate IT equipment (computer, data storage).

**STRATEGY #PREV2:** Encourage the Coast Guard and Puget Sound Harbor Safety Committee to develop coastal towing Standards of Care (SOC) appropriate for vessel traffic patterns and operating conditions in waters of the sanctuary and vicinity

**Background:** There have been disabled towing vessel and tow breakaway incidents involving towed tank barges off the coast of Washington or within the Strait of Juan de Fuca. This history suggests that incidents might have been avoided if towing vessels had been better equipped and maintained, or if towing vessels had applied an appropriate voyage planning criteria commensurate with the prevailing weather.

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*Protection of marine, cultural, and shoreline resources from the impacts of an oil or hazardous materials spill from a towed tank barge through improved coastal towing practices*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Collaborate with the USCG, other partner agencies, the marine industry, and/or Puget Sound Harbor Safety Committee to develop SOC's that identify accepted best marine practices for engaging in coastal towing operations off the Olympic Coast.

**ACTIVITY B:** After SOC's are developed, utilize ATBA monitoring information to advise the USCG and industry of apparent non-compliance with developed SOC's.

**ACTIVITY C:** Actively participate in local public meetings and comment on the USCG's proposed towing vessel inspection regulations with the goal of encouraging the earliest implementation of appropriate final rules.

**PARTNERS:**

- United States Coast Guard Thirteenth District Commander; Sector Seattle; and Sector Portland
- USACE Seattle District
- Puget Sound Harbor Safety Committee
- Canadian Coast Guard MCTS Tofino
- Marine Exchange of Puget Sound
- WA Department of Ecology
- Makah Office of Marine Affairs
- Coastal Treaty Tribes
- American Waterways Operators
- U.S. Navy (for movement of reactor core by barge)
- Lower Columbia Region Harbor Safety Committee

**RESOURCES:**

- Access to CVTS radar and AIS data as well as Marine Exchange of Puget Sound AIS data
- USCG and Ecology investigations into towing vessel incidents occurring within or near OCNMS waters
- USACE vessel traffic risk assessment currently under development
- OCNMS, USCG, and Ecology staff time.
- USCG Aviation asset for delivery of emergency towing package
- USCG Emergency Towing Package
- Emergency Response Tug located at Neah Bay
- CVTS for communications & vessel traffic coordination

**STRATEGY #PREV3:** Work with the U.S. Coast Guard to revisit, and adjust as appropriate with new information, the Port Access Route Study and the Waterways Analysis and Management System (WAMS) Study for the Strait of Juan de Fuca with focus on the relationship between the use of the inshore traffic lane and the ATBA.

**Background:** Until recently (e.g., the last year or two), ATBA compliance by the towing industry (vessels towing barges containing oil or hazardous material) has been noticeably less than that of the other restricted vessel types. Some believe that the inshore traffic lane for slower moving vessels, tugs and tows in particular, results in these vessels navigating in closer proximity to hazards at the western end of the Strait of Juan de Fuca, i.e. Duntze Rock, Duncan Rock, and Tatoosh Island, than vessels using the offshore approaches to the Traffic Separation Scheme. These vessels have also tended to have a higher incidence of

non-compliance since they tend to cut the corner through the northern portion of the ATBA.

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*Reduced risk of marine vessel accidents associated with the traffic lanes and close approach to the western entrance to the Strait of Juan de Fuca.*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Request that the USCG re-assess the need for additional aids to navigation to mark significant hazards (e.g., Duncan Rock at the entrance to the Strait of Juan de Fuca) given the current towing vessel navigation practices associated with the inshore traffic lanes that bring them in close proximity to such hazards.

**ACTIVITY B:** Encourage the USCG, in collaboration with the U.S. Army Corps of Engineers (USACE) vessel traffic risk assessment, to analyze vessel traffic patterns and risks, particularly in the vicinity of Duntze Rock, Tatoosh Island, and Duncan Rock, to determine whether additional protective measures, e.g., additional aids to navigation or new routing schemes, are required for safer navigation.

**PARTNERS:**

- United States Coast Guard, Sector Seattle
- U.S. Army Corps of Engineers
- Canadian Coast Guard Marine Communications and Traffic Services, Tofino
- Marine Exchange of Puget Sound
- Washington Department of Ecology
- American Waterways Operators

**RESOURCES:**

- Access to the Canadian Coast Guard MCTS radar data for vessel traffic off the outer Washington coast and western Strait of Juan de Fuca.
- AIS data from USCG VTS Puget Sound and the Marine Exchange of Puget Sound
- The Vessel Traffic Risk Assessment Model
- OCNMS program manager and staff time

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## **PREPAREDNESS & RESPONSE**

**STRATEGY #P&R1:** Work with the U.S. Coast Guard (USCG), Washington Department of Ecology's Spills Program, the maritime industry, tribal governments and others to promote improved spill preparedness and response through OCNMS participation in training exercises and regional oil spill planning activities.

### **WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*Improved preparedness and coordination for responding to a major oil or hazardous materials spill within or affecting marine resources.*

### **ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Collaborate with the USCG, WA Dept of Ecology, WA Dept of Fish & Wildlife, U.S. Navy, oils spill response organizations (OSROs), tribes, and the marine industry, and other partners to promote, plan and conduct drills and exercises that include coordination of multiple response assets, equipment deployment, wildlife recovery and treatment equipment, Neah Bay emergency response tug, USCG emergency towing resources, communication systems, and natural resource damage assessment. Participate in regional drills and exercises. Consider how to integrate OCNMS assets, including its vessels, with emergency response system for entrance to Strait of Juan de Fuca and Neah Bay Staging Area.

**ACTIVITY B:** In conjunction with key partners, develop mutually-beneficial training/exercises targeting specific issues and concerns relevant to OCNMS and partners, as well as lesson learned from recent spills and exercises, to improve planning and overall readiness. Training and exercise topics should include OCNMS staff in ICS positions; dispersant consultation process; waste management tradeoffs; treatment tactics; NRDA; endpoints for shoreline types; SCAT training; and liaison function with key stakeholders.

**ACTIVITY C:** Collaborate with USCG and outer coast land owners (Olympic National Park, Washington Islands National Wildlife Refuge Complex, Coastal Treaty Tribes) to plan and conduct, if feasible, an exercise testing debris removal from remote shoreline locations. This exercise will be used to test and evaluate issues and methods useful for pre-cleaning beaches and removing oily waste materials during response operations. If successful, promote regular exercise of safe and effective methods.

**ACTIVITY D:** Participate in technical workgroups and task forces of the Regional Response Team (RRT) and Northwest Area Committee (NWAC) to ensure that OCNMS priorities, data, and equipment are effectively integrated into the Northwest Area Contingency Plan. Key workgroups and task forces include Volunteers; Response, Science and Technologies; Geographical Response Plans; Wildlife; and Communications and Outreach.

**ACTIVITY E:** Participate in the review, development and improvement of Geographic Response Plans (GRPs) focusing on initial resource protection. Potential areas for GRP improvement include cultural resources, equipment appropriate for the operating environment, and additional GRP shoreline protection strategies.

**ACTIVITY F:** Participate in the Response, Science and Technologies Workgroup of the NWAC in development of a Shoreline Operational Guide that includes treatment tactics and cleanup endpoints for affected shorelines within the Sanctuary, proposed monitoring and other requirements for particularly sensitive resources or habitats, waste management guidelines. Promote integration of this Guide and its development into the Area Committee process.

**ACTIVITY G:** Participate in the Response, Science and Technologies Workgroup of the NWAC in development of a dispersant use matrix that summarizes spatial and temporal data related to natural resources in the water column potentially impacted by dispersed oil. Provide data held by OCNMS and facilitate incorporation of data from NOAA Fisheries.

**ACTIVITY H:** Participate in NWAC efforts to promote a strong non-dedicated vessel program that includes use of local resources, including fishing vessels regularly based in Neah Bay, LaPush, and the Grays Harbor area.

**ACTIVITY I:** Participate in the Places of Refuge Workgroup of the NWAC in the evaluation of potential places of refuge adjacent to the Sanctuary and improve the Places of Refuge matrix to be used by the USCG Captain of the Port.

**ACTIVITY J:** Support development, through partnership with the USCG, partner agencies, and non-governmental entities, of digital environmental sensitivity index database/maps of Washington's outer coast that include current and detailed data.

**ACTIVITY K:** Work with co-trustees to identify data sources and resource management tools useful during spill response and planning. Assemble the most current and detailed data available for region. Consider current technologies to display and analyze resource information. Share these data among co-trustees and the response community. Regularly complete updates and improvements to these data and tools.

**ACTIVITY L:** Participate in US/Canada transboundary planning through the Pacific States/British Columbia Oil Spill Task Force..

**PARTNERS:**

- United States Coast Guard Thirteenth District Commander; Sectors Seattle and Portland

- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Coastal area marine resource committees (MRCs)
- Coastal Treaty Tribes
- Other natural resource trustees
- U.S. Navy
- OSROs
- NOAA Office of Response and Restoration

**RESOURCES:**

- USCG District and Sector staff time
- Washington Department of Ecology staff time
- OCNMS staff time and travel costs for meeting attendance
- Tribal and MRC staff time and travel costs

**STRATEGY # P&R2:** Promote improved regional preparedness for spill response through coordination of the Outer Coast Trustees working group as a forum to share information and training opportunities.

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Coordinate with RRT to align and maintain a current contact list for natural and cultural resource trustees, natural resource managers, and spill response leads from agencies and organizations on the outer coast of Washington.

**ACTIVITY B:** Identify opportunities for joint training and information sharing related to regional preparedness for spill response, and promote participation through the Outer Coast Trustees.

**ACTIVITY C:** Collaborate with Outer Coast Trustees to seek funding to support trustee participation in training, coordination and educational opportunities.

**ACTIVITY D:** Identify emergency response plans developed by co-trustees, and collaborate with co-trustees to minimize inconsistencies and maximize the effectiveness of these plans.

**PARTNERS:**

- Washington departments of Natural Resources, Fish and Wildlife, and Archaeology and Historic Preservation
- Washington State Parks and Recreation Commission
- Quinault Indian Nation
- Hoh Tribe
- Quileute Tribe
- Makah Tribe



- Olympic National Park
- Washington Islands National Wildlife Refuges/U.S. Fish and Wildlife Service
- Clallam, Jefferson, and Grays Harbor counties
- Coastal area marine resource committees (MRCs)
- Parks Canada
- Regional Response Team members

**RESOURCES:**

- OCNMS staff time and travel costs for meeting attendance
- Tribal and MRC staff time and travel costs

**STRATEGY # P&R3:** Work with the Office of National Marine Sanctuaries and NOAA Office of Response and Restoration to regularly update and improve SHIELDS (Sanctuary Hazardous Incident Emergency Logistics Database System)

**STRATEGY # P&R4:** Develop an OCNMS organizational Response Plan that includes policies, tools and procedures for integration into an Incident Command Structure and consultation on response actions.

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*A well developed and continuously improved OCNMS Organizational Response Plan.*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Outline and develop an OCNMS Organizational Response Plan. Consider policy on outreach and liaison with key stakeholders, the public, elected officials and co-trustees within their shared boundaries during spill responses as part of the plan

**ACTIVITY B:** Ensure consistency between the OCNMS Organizational Response Plan and NWACP and to evaluate how to best integrate OCNMS information, policy and procedures into the Northwest Area Contingency Plan.

**ACTIVITY C:** Identify OCNMS staff training requirements and needs for emergency response, and maintain appropriate training levels.

**ACTIVITY D:** Assist volunteers working with OCNMS to get training that improves their utility and integration in to the larger response. Ensure that planning for sanctuary volunteer use in spill response is consistent with NWACP policy.

**ACTIVITY E:** Continue to develop and improve an internal OCNMS database that includes natural and cultural resource information useful for evaluation of potential resource impacts from spilled petroleum products and response

activities. Collaborate with regional resource managers, response organizations and the RRT to share capabilities, data and products with partners.

**ACTIVITY F:** Develop a clear process or decision tool to identify steps for dispersant, in-situ burn, or shoreline chemical use decision-making by OCNMS to support consultation with co-trustees, the FOSC, and the RRT.

**ACTIVITY G:** Work with the Office of National Marine Sanctuaries and NOAA Office of Response and Restoration to regularly update and improve SHIELDS (Sanctuary Hazardous Incident Emergency Logistics Database System)

**PARTNERS:**

- U.S. Coast Guard District 13
- NOAA Office of Response and Restoration
- NOAA National Marine Fisheries Service
- Northwest Area Committee
- Coastal Treaty Tribes
- Response industry
- Volunteers working with OCNMS
- Regional Response Team members

**RESOURCES:**

- ONMS and OCNMS staff time

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**RESTORATION**

**STRATEGY #RES1:** Develop plans and protocols for surveying and sampling to support natural resource damage assessment (NRDA) efforts during spills and coordination of response actions during natural events

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*A NRDA response plan developed for the outer coast of Washington. Natural resource damage assessment and restoration planning is coordinated with spill response training and actions to ensure recovery of trust resources.*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY:**

**ACTIVITY A:** Collaborate with trustees for Washington coast natural resources to develop an Outer Coast NRDA response plan that includes:

- Notification requirements
- Prioritized objectives
- Standardized protocols for ephemeral data collection
- Identification of beach access points
- Property access permissions

- Cultural resource considerations
- Lists of response resources (vessels, aircraft, personnel) that could be hired for NRDA purposes (vs. spill response clean-up efforts)
- Data quality objectives
- Training recommendations and requirements.

**ACTIVITY B:** Collaborate with co-trustees to identify and share opportunities to maintain appropriate training levels for NRDA work.

**ACTIVITY C:** Collaborate with co-trustees to integrate NRDA components into local and regional response exercises.

**ACTIVITY D:** Collaborate with co-trustees on inventorying, purchasing, placing, and maintaining ephemeral data collection equipment on the outer coast.

**ACTIVITY E:** Collaborate with co-trustees to seek funding to support participation in NRDA planning and training opportunities.

**ACTIVITY F:** Collaborate with co-trustees to review and revise response plans, as appropriate, following incidents that include NRDA response efforts.

**PARTNERS:**

- Coastal treaty tribes
- NOAA - Restoration Center; National Marine Fisheries Service; Office of Response and Restoration
- Regional Department of Interior NRDA staff
- Olympic National Park staff
- Washington Islands National Wildlife Refuges staff
- Washington departments of Fish and Wildlife and Natural Resources
- WA Resource Damage Assessment Committee.
- U.S. Navy

**RESOURCES:**

- OCNMS staff time and travel funds
- Ephemeral Data Collection Plans (US Navy, Tesoro Port Angeles)
- Agency budgets to procure Ephemeral Data Collection equipment

**STRATEGY #RES2:** Collaborate in regional efforts to identify baseline data needs to support Natural Resource Damage Assessment and to collect baseline data. [Also forward this strategy to the Collaborative Research, Assessment, and Monitoring work group]

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*OCNMS will have access to a 'library' of the pre-spill condition of selected natural resources in the sanctuary. This will aid trustees in determining resource injury which is used to determine restoration scaling.*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY**

**ACTIVITY A:** Collaborate with co-trustees to identify natural and cultural resources most vulnerable to oil spills and prioritize data collection for species and services useful for NRDA.

**ACTIVITY B:** Collaborate with co-trustees to outline needed studies and determine who can conduct baseline studies/sampling.

**ACTIVITY C:** Collaborate in development of a baseline data set of natural and cultural resources useful for identification of resources at risk during emergency response

**ACTIVITY D:** Collaborate with co-trustees to seek funding to support baseline data collection.

**PARTNERS:**

- Coastal Treaty Tribes
- NOAA Restoration Center, National Marine Fisheries Service, Office of Response and Restoration
- Department of Interior NRDA staff
- Olympic National Park
- Washington Islands Maritime National Wildlife Refuges
- Washington Departments of Fish and Wildlife and Natural Resources
- WA Resource Damage Assessment Committee.

**RESOURCES:**

- OCNMS staff time and travel funds

**STRATEGY #RES3:** Actively participate in restoration planning for projects within or adjacent to the Sanctuary.

**WHAT IS THE DESIRED OUTCOME OF THIS STRATEGY?**

*Restoration activities undertaken within or adjacent to the Sanctuary are successful, ecologically relevant, and support overarching management goals.*

**ACTIVITIES NECESSARY TO ACHIEVE STRATEGY**

**ACTIVITY A:** Participate in restoration projects through phases of planning, implementation, and monitoring that occur within Sanctuary boundaries.

**ACTIVITY B:** Promote inclusion of effectiveness monitoring and adaptive management strategies for restoration projects within the Sanctuary.

**ACTIVITY C:** Track proposals, coordinate with other trustees with responsibility for affected resources, and provide data and input to support decision-making, as appropriate for restoration projects adjacent to or with potential to impact the Sanctuary.

**PARTNERS:**

- Coastal Treaty Tribes
- NOAA Restoration Center, National Marine Fisheries Service, Office of Response and Restoration
- State of Washington
- U.S. Department of Interior
- U.S. Army Corps of Engineers
- Academic Institutions

**RESOURCES:**

- OCNMS staff time and travel funding

Participant List for the Spill Prevention, Preparedness, Response, and Restoration Working Group and Subgroups (x denotes participation in the subgroup conference call)

	Prevention Subgroup	Preparedness and Response Subgroup	Restoration Subgroup
Chip Boothe, WDOE – WG Co-chair			
Bob Bohlman, Advisory Council – WG Co-chair	x		
Scott Bornemann, USCG			
Chad Bowechop, Makah Office of Marine Safety	x		
Joe Bowles, MSRC			
Diane Butorac, WDFW	x	x	
Tom Callahan, WSMC			
Craig Cornell, MSRC	x	x	
Mike Doherty, Clallam County			
Dan Doty, WDFW			x
Fred Felleman, Makah Tribe and public interest		x	
Tiffany Gallo, NRC			
Steve Fradkin, ONP			x
Tom Gibbons, Quinault Nation			
Jennifer Hagen, Quileute Natural Resources			x
George Hart, US Navy	x		x
Doug Helton, NOAA/ORR		x	Lead
Frank Holmes, WSPA			
Rob Jones, NWIFC			
Jerry Joyce, public interest		x	
Scott Knutson, USCG		Lead	
Rebecca Post, WDOE			x
Heather Parker, USCG		x	
Bruce Reed, Foss Maritime			
Jim Riedel, NRC			
Kevin Ryan, USFWS			
Warren Scarlett, Hoh Tribe			
Donna Spalding, NW CruiseShip Association			
Colin Smith, ONP			
Barry Troutman, WDFW		x	
John Veentjer, MEPS	Lead		
Eric Wilkins, NWIFC	x		x
Ruth Yender, NOAA/ORR			
Liam Antrim, OCNMS	x	x	x
George Galasso, OCNMS			
Bob Pavia, ONMS – staff lead			