

OLYMPIC COAST
NATIONAL MARINE SANCTUARY
Meeting Minutes

OCNMS Advisory Council Meeting
July 25, 2014

Clallam County Courthouse
Port Angeles, WA

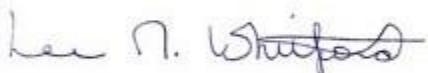
Olympic Coast National Marine Sanctuary
NOAA, Office of National Marine Sanctuaries
115 E. Railroad Avenue, Suite 301
Port Angeles, WA 98362-2925

Reviewed by OCNMS Superintendent:



Carol Bernthal, Superintendent

Approved by AC Chair:



Lee Whitford, Chair

Advisory Council (AC) Members/Alternates in Attendance: Lee Whitford (Education), Heather Reed (WDFW), George Hart (US Navy), Mike Doherty (Clallam Co. Commissioner), Phil Johnson (Jefferson Co. Commissioner), Rebecca Post (WDOE), John Veentjer (Marine Industry), Bob Boekelheide (Citizen-at-Large), Lora Leschner (Conservation), Jennifer Hagen (Quileute Tribe), Jan Newton (Research), Tom Mumford (Research), John Stadler (NMFS), Katrina Lassiter (WDNR), Sarah Creachbaum (ONP), Jennifer Brown-Scott (USFWS), Capt. Nathan Knapp (USCG),

Presenters and Members of the Public in Attendance: Brian Winter (ONP), Jim Jewell (OCNMS volunteer), Judith Morris (Office of Congressman Derek Kilmer), Melissa Williams (Feiro MLC), Elden Housinger (citizen), Jerry Creason (citizen), Ann Sibole (citizen/NPS employee), Jessica Hale (UW student), Breanna Walker (UW student), Camiel Dhooge (citizen), Payton Dhooge (youth citizen),

NOAA/OCNMS Staff in Attendance: Carol Bernthal, George Galasso, Kevin Grant, Karlyn Langjahr, Liam Antrim, Ed Bowlby, Nancy Wright, Kathy Hough, Heidi Pedersen, Norma Klein, Jacqueline Laverdure (OCNMS); Dayna Matthews (NOAA-Enforcement)

Chair Lee Whitford called the meeting to order and reviewed the purpose and scope of the Advisory Council per its Charter. Clallam County Commissioner Mike Doherty welcomed the attendees to Port Angeles and distributed historical information on Clallam County and announced that he is retiring from his position but will remain active in the community, including marine issues.

Adopt Agenda – The draft agenda was updated with one change due to Steve Fradkin's inability to deliver his presentation, "Mercury levels in highland lakes of Olympic National Park". It will be rescheduled for a later meeting. ***The modified meeting agenda was approved with full AC consensus.***

Internal Affairs:

Approval of May 2014 Meeting Minutes – Rebecca Post pointed out corrections to be made on pages 6 and 10. ***Rebecca Post motioned to approve the meeting agenda and John Veentjer seconded. There was full AC member consensus to approve May meeting minutes after incorporating these changes.***

Recruitment of Education Alternate and Marine Resources Committee Alternate Seats – Karlyn shared that the Federal Register Notice was published on May 15 announcing openings for the Education alternate and Marine Resources Committee alternate positions on the Advisory Council with an application deadline of June 30. The AC Executive Committee met in early July to review applicants and make recommendations to OCNMS Superintendent. The

selected candidates are in a national vetting process with background checks and will be seated at the September AC meeting.

Status on Tourism Working Group Recommendations – Carol followed up on the Tourism Working Group’s (TWG) final report and recommendations that were presented to and approved by the council at the May meeting. Carol forwarded the TWG’s recommendation letter to Director Dan Basta and WCR Director Bill Douros, who both acknowledged and commended these efforts. One immediate action that OCNMS is following up on is to create a link to the regional Tourism Bureau on its website. OCNMS cannot list individual businesses, but businesses can be found via the Tourism Bureau’s website. Another opportunity Carol mentioned was a certification process with operational standards for tourism operators. A company would apply to be certified and OCNMS could list approved certified businesses directly on its website.

Regarding TWG’s prioritized recommendation for supporting voluntourism, OCNMS submitted a Mini-Grant proposal through ONMS to promote the September CoastSavers coastal cleanup. OCNMS was one of six successful applicants awarded a small amount of funds under the ONMS Travel and Tourism Strategy. OCNMS will approach local businesses along the coast asking them to give a promotional deal for those coming to participate in the beach cleanups. They are aiming for a larger participatory audience in the fall coastal cleanup in its second year and will broaden marketing for the event

(http://www.coastsavers.org/international_coastal_cleanup.html#.U_0AlfldU1I). This way there is potential for the weekend to grow beyond a one-day coastal beach cleanup and promote visitation to our coastal locations bordering the sanctuary. Carol has also met with several Visitor Bureaus and Chamber of Commerce representatives to work better with promoting OCNMS as a tourism destination, similar to Olympic National Park. In terms of use of social media, OCNMS will use Facebook and Twitter during a WCR social media event called “Get Into Your Sanctuary” Day on Saturday, Aug. 2nd. OCNMS will also be revamping its website, including the visitors section, during this upcoming fall or winter.

ONMS Sanctuary Classic – Carol informed the council of The Sanctuary Classic, a free, recreational fishing and photography contest taking place in all national marine sanctuary sites from June 8 through September 1, 2014. ONMS partnered with recreational fishing organizations to help showcase the important economic and cultural roles of recreational anglers following sustainable fishing practices. The event also hopes to encourage the next generation of recreational fishers. The event is coordinated by Sportfishing Conservancy and co-sponsored by the Guy Harvey Ocean Foundation and ONMS. Photos of catches within any of the 14 sites are posted to a website under one of several different categories. Carol encouraged members to distribute contest information and details to constituents so that OCNMS would be better represented this year. For more information visit www.sanctuaryclassic.org

Information Items:

Elwha River Dam Removal and Restoration – Brian Winter of Olympic National Park (ONP) reported on the progress of the Elwha River Dam removal project. The dam removal began in September 2011, with the lower Elwha Dam (105 ft. tall, outside of ONP) removal completed in March 2012. The natural river flow was restored through former Lake Aldwell and ONP partnered with Clallam Co. to offer popular interpretive walks on the former reservoir area. Only a third of the 210 ft. of the upper Glines Canyon Dam inside ONP remained by October 2012. At present, 32 feet of Glines Canyon still stand and are scheduled to be removed by a single blast in September, dependent on stream flow. Federal laws required that managers consider the adverse effect of sediments from the dam removals to protect water users. A Sediment Management Plan was created so that removal would take place in controlled increments and allow the river to erode a portion of the reservoir sediments to the sea. A rate of dam removal was designed to be fast enough to limit impacts to a few year classes of fish, but slow enough that downstream impacts could be tolerated. An estimated total of 27 million cubic yards (yd^3) of sediment is expected to be released in the process, with 21 million yd^3 originating from Lake Mills, consisting of $\frac{1}{2}$ clay and silt and $\frac{1}{2}$ sand and gravel. An anticipated 6 million yd^3 of sediment will be released from Lake Aldwell, of a different composition, with $\frac{2}{3}$ consisting of clay and silt and $\frac{1}{3}$ of sand and gravel. As of July 2014, 12.2 million yd^3 had so far been eroded (10.2 million from Lake Mills and 2.0 million from Lake Aldwell).

The Elwha water treatment plan was designed to protect the Nippon Paper industry's mill, the tribe's fish hatchery, the State's rearing channel, and the city's domestic water supply. The city's water surface intake was replaced with a state-of-the-art facility, while still allowing fish to pass. A partnership with Lower Elwha tribe initiated revegetation efforts along the riparian zone. Currently the mouth of the Elwha is characterized by a dynamic estuary, the presence of gravel in river upstream necessary for salmon spawning, natural back-and-forth movement of the river, shoaling, and sandy beaches in Freshwater Bay and on Lower Elwha reservation. In 2012 fish were recorded spawning above the Elwha Dam, the same year it was fully removed. More than fifty fish representing steelhead, bull trout, and chinook species have been radio-tagged to study their movement and patterns and monitor the dam removal effects. The estimated fish population in the Elwha once when fully restored, as listed in the EIS process, are close to 400,000 for pink salmon and 30,000-40,000 for chinook.

For more information visit: www.nps.gov/olym/naturescience/elwha-ecosystem-restoration.htm or www.nps.gov/olym/naturescience/restorationoftheelwha.htm.

Science Working Group – Rebecca Post, Co-Chair of the Science Working Group (SWG), presented a summary of their interim report. Rebecca reminded the council of the two major purposes of the SWG, based on strategies ECO9 and CLIM2 of the OCNMS 2011 Management

Plan. She pointed out that other regional efforts since that time have been initiated to identify ecosystem indicators on a larger scale; therefore in regards to indicator species identification for OCNMS the SWG decided to wait for results from the state's ecosystem indicators work performed for coastal marine spatial planning, and to expand upon those recommendations as needed. The SWG also recommended focusing its efforts on defining indicators, metrics and information or data types/sources relevant for each of the condition report topics for the next generation of OCNMS Condition Report (which is also based on indicators) and began discussing and developing a matrix for it. As for addressing sentinel sites, NOAA has its own process for sentinel sites when first developed in 2010-11, focused on sea level rise (though OCNMS will not limit its efforts to sea level rise). The OCNMS Condition Report and Science Needs documents are internal science documents and the sanctuary-based documents most applicable to SWG. The SWG will determine if they will assist in updating OCNMS's Climate Change and Ocean Acidification Science Needs document. Members of the SWG will meet one more time via email and recommend whether they should disband or not and report back to the council at the next meeting.

Report on National Advisory Council Chairs' Summit – Heather Reed, Vice Chair, represented OCNMS at the 2014 National Advisory Council Chairs' Summit hosted by Flower Garden Banks National Marine Sanctuary in Galveston, Texas from June 2-4. Former Chair Chip Boothe attended the last Summit in 2012, which initiated efforts to build a larger coalition for national marine sanctuaries tied to the national travel and tourism initiative. Topics addressed at this year's Chairs' Summit correlated well with the Tourism Working Group's recent work and outputs for OCNMS. The National Marine Sanctuary Advisory Council Chairs met with the Marine Protected Areas (MPAs) Federal Advisory Committee again and produced a "call to action" document *Destination Marine Protected Areas: Sustaining America's Most Treasured Ocean Places for Recreation and Stewardship* for all advisory councils to review and vote on whether to endorse or not. The overarching call to action reflects a collective commitment to ensure proactive management of growing ocean recreation in these special places in order to sustain their natural and cultural assets. The document highlights actions in four related areas to enhance the ability of MPAs to meet opportunities and challenges with increased recreation activity in our marine and Great Lakes environments:

1. Invite people to play (responsibly) in MPAs
2. Embrace the human dimension of ocean places
3. Sustain MPA ecosystems and values
4. Engage recreational users as ocean stewards

The Chair of MPA Federal Advisory Council had already signed the call to action and each SAC Chair will present this to his/her council to vote on adopting. Once all supportive signatures come through, the document will be forwarded to the heads of Department of Commerce and Department of Interior. OCNMS advisory council members discussed the potential benefits of signing this document. ***Rebecca Post made a motion to approve the call to action; Katrina Lassiter seconded; unanimous support was voiced with full AC member consensus.*** Lee stated that she will send sign the document and Karlyn will forward to ONMS for compilation. The full

Summit synopsis can be accessed at:

olympiccoast.noaa.gov/involved/sac/national_ac_chair_summit_synopsis_2014.pdf.

The link to the call to action document is: olympiccoast.noaa.gov/involved/sac/joint-mpa-0714.pdf.

Marine Debris Monitoring Efforts in OCNMS – OCNMS staff Heidi Pedersen gave an update of the NOAA Marine Debris Monitoring efforts adopted by OCNMS. Efforts to monitor coastal marine debris began in 2011 after the tragic Japanese tsunami, when it was anticipated that a large amount of debris would cross the Pacific over time. OCNMS had been conducting shoreline debris monitoring since 2000, but adopted the national protocols and methods in 2012. Data are collected by trained citizen scientist volunteers in California, Oregon, Washington, British Columbia, Alaska, Hawaii and a few other sites for a total of approximately 150 sites involving around 40 partners. Currently in WA State there are 13 regularly-monitored sites on the outer coast and 7 sites in the Strait of Juan de Fuca. Sites that can be considered for MDM include sandy beaches or pebble shorelines that have clear and year-round access and at least 100m of length parallel to the water. They should not have breakwaters, jetties or regular cleanup activities. Material collected is broken into type (plastic, metal, glass, rubber, processed lumber, cloth/fabric or other) and ranges in size from bottle cap size to 1 ft. Large debris items are noted in a separate section of the data sheet. All information is uploaded onto the national database, including items that sites are particularly interested in. For example, OCNMS is specifically interested in objects such as firework pieces, short yellow ropes, packing straps, baitfish container parts, etc. She showed an example of a site monitored and a snapshot from various dates surveyed over different seasons and years. Protocols were designed to assess variability in abundance of debris, types and density by material category, temporal trends, and potential drivers or sources of debris. Heidi reported that some Japanese-tsunami debris is washing ashore, but not as much as predicted. It is also difficult to definitively pinpoint debris to the actual March 11, 2011 tsunami event. Initial data analyses of almost two years of data show that Strait of Juan de Fuca yielded an average of 15 items/survey, with plastic the predominant material type (88%). Along the outer coast, an average of 67 debris items are collected per survey, with plastic consisting of 92% of all items. She noted interesting trends in foamed plastic surges and the presence of yellow plastic ropes associated with the oyster fisheries. Heidi thanked all of the dedicated volunteers on behalf of OCNMS for their efforts, both in the field and in processing the data.

Lunch Break

Get to Know Your Sanctuary –Lee Whitford and Karlyn Langjahr co-presented a Jeopardy game between council primary representatives and alternates, testing SAC member knowledge on the sanctuary and the advisory council in different categories.

Sea Kelp Communities and Health in Sanctuary and Region – Tom Mumford from the University of Washington presented on kelp in OCNMS and the region, including data

contributions from Helen Berry of WDNR's Nearshore Habitat Program. Sea kelp belong to Order Laminariales of brown algae and at least 21 species are found within the sanctuary (with 2 additional species likely, *Eisenia arborea* and *Laminaria longipes*). Floating canopy kelp (giant kelp and bull kelp) are what we typically associate kelp as, although they also come in stipitate and prostrate forms. Giant kelp (*Macrocystis pyrifera*) are perennial sporophytes that live up to 5 years with a small float on each blade and reproductive sporophylls at the base of the plant. Bull kelp (*Nereocystis luetkeana*) are annual sporophytes with only one float at the top of stipe and all blades are reproductive. They are most common in our region. The other floating kelp is Feather boa kelp (*Egregia menziesii*). A common invasive kelp is Wakame, or *Undaria pinnatifida*, an Asian native that has spread all over the world including to California. Tom covered the complex life history of kelp and their alternation of heteromorphic generations, of which parts are still unknown. Kelp is a foundation species, meaning it forms the basis for the entire ecological community, hosting incredible biodiversity as "biogenic habitat". As primary producers, kelp fix an enormous amount of carbon but only 1% is transferred directly to herbivores, such as sea urchins, and 10% to detritus. The bulk goes to particulate organic carbon and dissolved organic matter, which feed bacteria and protozoa, strand on beaches or enter deep water. Therefore, the kelp and kelp detritus are the main drivers of the food web for sandy beaches, subtidal areas, offshore surface waters, submarine canyons the deep ocean and rocky intertidal areas. Kelp sporophytes can also affect the geomorphology of the environment, serve as a source of biomass for energy production, and are harvested for source of human food and products.

A baseline in trends in kelp distribution and abundance dates back to late 1800s, with kelp records kept in the early 20th century as it was used as an alternative for soda ash prior to World War I. In Washington, bull kelp inventories in Central Puget Sound indicate widespread losses in recent years. Kelp distribution in OCNMS and Strait of Juan de Fuca began in 1989 via aerial photography, showing a gradual decline with most variation occurring by bull kelp, the annual species. Kelp also tends to suffer during El Niño events, characterized by warm, dry conditions with low upwelling. Overall, kelp is increasing on the Outer Coast in many sections but has some extremes in year-to-year changes. Along the Western Strait kelp is increasing in most sections and most abundant and consistent on a year-to-year basis. The Eastern Strait has comparatively little kelp with the fewest increasing sections, predominantly bull kelp. Bull kelp also tends to be found in the more exposed areas along the coast and strait, but inter-annual variation is high and can show locations where kelp beds are most persistent. Overall the effects of global climate are predicted to impact kelp population and distribution due to increased sea surface temperature, ocean acidification, sea level rise, increased frequency and severity of storms, changing ocean current patterns, increased occurrence of hypoxia/anoxia

and altered hydrologic patterns. Certain phases of kelp life history are negatively impacted by increased water temperature and carbon dioxide; however, the combined effects of forecasted warming and ocean acidification on kelp are unknown. Effects of sediment and its transport, such as from the removal of Elwha River dams, could reduce canopy-forming kelp distribution as seen in changes at Freshwater Bay and Elwha bluffs. Stressors to kelp leading to kelp losses include: water quality, change in light availability, silted substrate, sea urchin/kelp crab/sea cucumber abundance, cyclic shifts in algal community structure, and climate change. Tom displayed and described a conceptual model of kelp stressors by response of kelp gametophytes and sporophytes. He noted that kelp is well-protected in theory, with harvest regulations and grow permits required, but difficult in practice to enforce. Direct associations between kelp and fisheries, particularly salmon and rockfishes, have been documented. Indirect associations have also been noted including: base of the food web, substrate for herring spawning, refuge from predation, and critical juvenile fish habitat. Kelp are referred to in OCNMS Management Plan of 2011 and Environmental Assessment in Strategy HP1, which assesses and mitigates threats to physical and biogenic marine habitats (including kelp and other macro algae) and collaboratively develops appropriate management measures to protect and conserve them. In summary, kelp responds to a variety of stressors, provides biogenic habitat, yields high primary productivity and is widely monitored. Tom identified management recommendations such as: continuing to monitor floating kelp using DSCR conceptual model to craft monitoring plans; expanding monitoring mapping to sub-tidal and non-floating kelp species; determining changes of kelp beds at La Push; collaborating with rockfish habitat researchers; researching kelp contributions to off-shore deep water ecosystem; and preparing to respond to oil spills. He referenced technical report published in 2007 called *Kelp and Eelgrass in Puget Sound*, available online at www.pugetsoundnearshore.org/technical_papers/kelp.pdf.

Update on ONMS Sanctuary Nomination Process – Carol updated the council on the status of ONMS Sanctuary Nomination Process, the mechanism by which the public can nominate nationally significant marine and Great Lakes areas as potential new marine sanctuaries. She gave a timeline overview of the history of the National Marine Sanctuary system, designated by either NOAA or by Congress. The original Site Evaluation List (SEL) was deactivated in 1995, preventing new sites from becoming established. However, during that time expansion of several sites occurred (Flower Garden Banks NMS, Florida Keys NMS, Channel Islands NMS, Monterey Bay NMS, NMS of American Samoa), with three additional site expansions in process. There have been many requests nation-wide for additional sites to be added to ONMS, so NOAA released a Federal Register Notice calling for public comments on its Sanctuary Nomination Process (SNP) in 2013, which received nearly 18,000 comments (mostly in support).

The new six-step process consists of the following stages (and does not guarantee a new sanctuary to be established):

1. Community builds a nomination
2. Community submits a nomination to NOAA
3. NOAA makes an initial review of the nomination
4. NOAA takes a closer look at the nomination
5. Nomination is accepted
6. Nominated area is added to the inventory (*which does not guarantee addition to ONMS*)

NOAA will examine national significance criteria and management considerations for nominated sites in order to determine if the area would be a valuable addition to the national sanctuary system. Carol thanked the council for their resolution letter in 2013 supporting the reopening of the Site Nomination Process in a resolution letter:

olympiccoast.noaa.gov/involved/sac/letter_sel_reactivation.pdf. The Site Nomination Process summary document from ONMS can be found at:

<http://olympiccoast.noaa.gov/involved/sac/snp2014.pdf>. To learn more about SNP, visit www.nominate.noaa.gov.

Public Comment – There were no public comments made; Mike Doherty congratulated OCNMS on its recent 20th anniversary and thanked staff and their efforts to contribute to Clallam County's marine education and resource management for future generations.

Superintendent's Report – Carol shared the opportunity for SAC members to weigh in on a NOAA-wide saltwater recreational fisheries policy being developed by NOAA Fisheries, intended to help guide agency decision-making surrounding recreational fishing. She encouraged members to contribute by commenting online or by participating in the free informational webinars, likely to take place in August or early September. Heather Reed participated in an evening public town hall and is willing to join a webinar to represent OCNMS's Advisory Council. For more information, visit

www.nmfs.noaa.gov/sfa/management/recreational/policy/index.html or send questions to nmfs.recfishpolicy@noaa.gov. Carol also announced the "Get Into Your Sanctuary" social media event on Sat., Aug. 2nd among West Coast NMS. She encouraged participation via sharing photos and posting to Facebook or Twitter using #VisitSanctuaries. Learn more at sanctuaries.noaa.gov/about/westcoast-getinto.html.

Carol highlighted sanctuary updates from the early summer months and referred council members to the Office Report for further information and details:

1. OCNMS celebrated its 20th anniversary on July 16th at the City of Port Angeles' Concert on the Pier to the bluegrass band *Luck of the Draw*. The free family-friendly event featured educational booths with activities by OCNMS and four sanctuary partners,

Sanctuary Sam the sea lion, an inflatable life-sized orca “Mike J26”, marine debris art sculptures, and a ROV demonstration by summer camp youth. Volunteers from MBNMS on a week-long exchange to OCNMS participated in the event and served as docents in Olympic Coast Discovery Center for the day.

2. A shipwreck occurred in the sanctuary on July 4th south of Destruction Island while in route from California to Canada. The engine of pleasure boat *La Pietra*, a 71' catamaran, caught on fire and sunk in 91' deep water. Its two passengers were rescued by US Coast Guard. OCNMS received its coordinates and found it while on the *RV Tatoosh* using multi-beam surveys. Simultaneously they were able to locate *Mystic Fjord* which sank in 2013. Staff are working with the insurance company on the boat's salvage.
3. OCNMS is in its peak field season with *RV Tatoosh* deploying its oceanographic mooring buoys. Ed Bowlby conducted the annual sea otter survey and 2013 survey results have just been posted to the OCNMS website. Staff continue intertidal monitoring, including observations of sea star wasting disease, with assistance from a Hollings Scholar (Jessica Linder).
4. The Education program has been very busy with its annual Junior Oceanography and ROV Explorers summer camps, run with Feiro Marine Life Center. Another Hollings Scholar (Emma Rice) was assigned to plan and co-lead the camps.
5. Several other small boats have been washing ashore, possibly related to the Japan tsunami event.
6. George has been working on the Maritime Heritage Program database. The WCR Coordinator has been researching shipwrecks in the sanctuaries. As part of the sanctuary's ongoing effort to improve national historic preservation compliance with Section 106, OCNMS is working on accounting for the potential impacts of these cultural resources. There are 69 shipwrecks with enough information to add to the GIS component of the database system. This information has been sent to the State Historic Preservation Officer and OCNMS will meet with her in August. OCNMS is also working toward a Cultural Resource Management Plan.
7. Bob Boekelheide was invited aboard the *RV Tatoosh* as the naturalist for two cruises in mid-July for OCNMS volunteers. They cruised out of La Push, observing the wildlife and scenery of various seastacks including the Quillayute Needles. Bob highlighted two bird species of interest observed: the Ancient Murrelet and the Manx Shearwater.
8. Katrina inquired about the proposed Port Angeles waterfront marine science center, which was expected to involve Feiro Marine Life Center and possibly OCNMS. Carol noted that the interested developer decided not to purchase the land in question so the marine campus is not currently in process of development.

The Office Report for July 2014 can be found at:
olympiccoast.noaa.gov/involved/sac/officereport_july_2014.pdf.

Member Reports & Future Agenda Topics

- John Stadler shared that salmon EFH revisions are up for public comment through mid-August with about six weeks for NMFS to complete the process of either approving or disapproving. Kelp will now be included as a habitat area of particular concern. The PMFC discussed the Groundfish EFH at their June meeting and decided to push it back until the March 2015 meeting, after very serious conversations between NGOs and commercial fishers. Deep sea corals have been a major issue on the Groundfish EFH review. The Deep Sea Coral Research and Technology Program is funding a series of webinars open to the public beginning in August, with experts on deep sea corals in the United States to better understand the most current information on ecology. John will send to Karlyn to have her distribute the webinar information to SAC members.
- Sarah Creachbaum shared that ONP has been very busy and reported a 5% increase in visitation park-wide for the month of July. Fire danger in ONP has been low and ONP has dispatched all but one engine to other WA locations to assist in fire-fighting efforts. They just issued a Notice of Intent and public announcement for planning efforts for long-term management of exotic goat populations within the park. Spotted owl monitoring indicated that the population will no longer be viable, with only 4 nesting pairs within the area. Dr. Steve has been busy with ocean acidification and mercury levels in highland lakes.
- Lora Leschner of Pacific Joint Venture met with partners about marine bird surveys and habitat issues. Sea Duck Joint Venture is funding some offshore surveys this winter and along with PJV will collaborate on regional mapping of important habitat areas. Lora attended the recent North Pacific Landscape Conservation Cooperative meeting in Olympia, well-represented throughout the region with discussions on climate change. She also reported on behalf of Conservation primary, Eric Delvin, that TNC is coordinating the WA Coast Restoration Initiative this legislative session. They have a stronger coalition and are asking for \$15 million. Casey Dennehy from Surfrider Foundation also sent Lora an update on the Washington State Coastal and Ocean Recreation Study's survey. They have received over 3,000 completed surveys of the panel survey with 4,000 activity points mapped and 157 completed opt-in surveys with almost 900 activity points mapped. They need more data on diving, kite surfing, hang gliding, parasailing and horseback riding.
- Jennifer Brown-Scott noted that USFWS experienced a theft on Destruction Island of remote monitoring equipment and cameras for Tufted Puffin research. She reminded the SAC that these are closed areas to the public, and to report any persons if observed on the island. They will be starting a surrogate species (aka focal or indicator species) planning effort next year. It will include a huge partnership and involve overall ecosystem health.

- Jan Newton shared that the Cha'Ba buoy is back out in the water off of La Push and information can be found at NANOOS's website. The Washington OA Center has been busy working on implementing the OA actions and she thanked the council for their recommendations and input given in 2013. She reported that monitoring did take place on the outer coast on a cruise; modeling and forecasting research is also going forth and will soon be posted online; species experiment is going forth by a team (NOAA, UW and WWU) and will include plankton, krill, copepods, Dungeness crab, geoduck and oysters. She voiced that sanctuary data from the moorings are valuable and being used. NANOOS will be holding its annual governing council meeting in August.
- Katrina Lassiter shared that hired consultants presented on draft sector analysis reports during the recent WCMAC meeting. The analyses will be completed in August and can be made available upon request. The reports will cover history and potential future and issues shaped by five different sectors, including marine and renewable energies, tourism and recreation, fishing (commercial and recreational), shipping and aquaculture. WDNR is hiring a consultant to do an economic analysis for the coast at a broader, higher level.
- Captain Nathan Knapp announced that USCG in Washington D.C. determined the high volume product area for oil transportation. There are many tanker traffic studies being conducted in the Puget Sound. USCG will probably hire a contractor to do a meta-analysis of all of the different traffic studies. They also helped with the recent shipwreck in OCNMS.
- Tom Mumford accompanied a course field trip to Shi Shi Beach. Permits were obtained to collect ~50 species of seaweeds. Researchers are attempting to barcode (molecular analysis) all species of seaweed in the state and data will become available.

The next OCNMS Advisory Council meeting will take place on **Friday, September 26** in Aberdeen, WA. Meeting was adjourned.