

OLYMPIC COAST
NATIONAL MARINE SANCTUARY
Meeting Minutes

OCNMS Advisory Council Meeting
March 17, 2017

Quileute Tribal Administration Office
La Push, WA

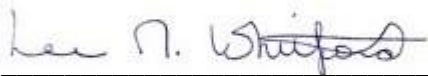
Olympic Coast National Marine Sanctuary
NOAA, Office of National Marine Sanctuaries
115 E. Railroad Avenue, Suite 301
Port Angeles, WA 98362-2925

Reviewed by OCNMS Superintendent:



Carol Bernthal, Superintendent

Approved by AC Chair:



Lee Whitford, Chair

Advisory Council (AC) Members/Alternates in Attendance: Lee Whitford (Education, Chair), John Veentjer (Marine Industry, Secretary), Jennifer Hagen (Quileute Tribe), Joe Schumacker (Quinault Indian Nation), Dana Sarff (Makah Tribe), Dave Hudson (Hoh Tribe), Mark Ozias (Clallam County), Jodie Toft (Conservation), Dan Ayres (WDFW), Jennifer Hennessey (WDOE), Katrina Lassiter (WDNR), Carolyn Winters (US Navy), Joel Kawahara (Fishing), Allison Mahaney (Citizen at Large), Tom Mumford (Research), Rich Osborne (Marine Resources Committee), Steve Fradkin (ONP), Josh Peters (WDNR alternate), Mike Barton (Education alternate), Stephanie Sleeman (US Navy alternate)

Presenters and Others in Attendance: Katie Krueger (Quileute Tribe), Bob Lassiter (visitor), Beverly Loudan (Quileute Tribe), Joshua Baine Etherton (Quileute Tribe)

NOAA/OCNMS Staff in Attendance: Carol Bernthal, George Galasso, Alisha Friel, Nancy Wright, Karlyn Langjahr (OCNMS)

Charles Woodruff, Quileute Tribe Chairman, welcomed council members and public to Quileute Tribal reservation and acknowledged the importance of partnerships with federal and state agencies among others. He is thankful for relationships that include data sharing, education like the inflatable humpback whale at the Quileute School today and more. David Hudson led a prayer song.

Adopt Agenda– The draft agenda was adopted after Lee noted the addition of an update on upcoming National Advisory Councils webinar in the Internal Affairs section. ***There was no further discussion and motion passed by full AC member consensus.***

Internal Affairs:

Approval of January 2017 SAC Meeting Minutes– U.S. Navy had contacted Karlyn to refine the information about their presentation and member report. U.S. Coast Guard also provided clarification for their member updates. Karlyn incorporated all requested changes. ***Joel Kawahara motioned to approve the meeting minutes with those modifications incorporated, and Tom Mumford seconded. There was no further discussion and motion passed by full AC member consensus.***

Elect Vice Chair for Executive Subcommittee– Casey Dennehy stepped forward to serve as Vice Chair due to Bob Boekelheide’s departure from the advisory council at the end of 2016. Casey was unable to attend today’s meeting, but is excited about the opportunity. He had sent out an email to council members expressing his interest in serving and there were no other candidates. ***John Veentjer motioned to elect Casey as Vice Chair, and Jennifer Hennessey seconded. The motion passed by full AC member consensus.***

Ocean Acidification Sentinel Site Working Group Update– Carol gave an update on the work following the Ocean Acidification Sentinel Site (OASes) workshop which took place in September 2016. Participants highlighted the gap linking biological monitoring and chemical

processes. OCNMS and Pacific Marine Laboratory scientist Nina Bednarsek are investigating opportunities to conduct pteropod monitoring this summer off RV *Tatoosh* or *Nautilus*. The consortium formed after the OASeS workshop submitted a proposal to conduct a vulnerability assessment of species that are culturally-important and vulnerable to ocean acidification. If funded, the project would summarize biological and chemical information and work closely with tribal communities on assessing culturally important species aspect. Monterey Bay and Olympic Coast national marine sanctuaries also collaborated on an educational mini-grant to NOAA's Ocean Acidification Program to fund hand-held pH devices to be incorporated into schools and classrooms. OCNMS is finalizing the draft OASeS workshop proceedings, which will be distributed to workshop participants and OASeS Working Group members for review.

National Marine Sanctuaries Advisory Council Chairs Webinar– Lee Whitford reported that chairs from the fourteen sites in National Marine Sanctuary System will meet by webinar on March 23. In addition to a nearly annual summit, they have been meeting twice/year by webinar to stay connected and discuss system-wide issues and news. ONMS Director John Armor will provide an overview and individual chairs will follow with site-specific highlights and updates. Lee plans to discuss the outcome of OCNMS's decision on the Joint Enforcement Letter and welcome input from council members on points to highlight. She also plans to send out a summary after the webinar.

Enforcement in OCNMS and Sanctuaries– George Galasso, OCNMS, presented on enforcement in OCNMS. He summarized OCNMS prohibited activities, with one that cannot be permitted by law: exploring for or developing oil or mineral resources. Prohibited activities that can be permitted if they meet sanctuary management objectives and have minimal impact include:

- Discharging or depositing any material
- Moving, removing or injuring historical or cultural sanctuary resources
- Altering the seabed, includes abandonment of material
- Injuring or harassing marine mammals, sea turtles and seabirds
- Flying motorized aircraft (under 2,000 feet) within 1 nautical mile seaward of the coast

George listed some exemptions to the regulations which include discharges related to lawful fishing or routine vessel operations, Quillayute River Navigation Project, life-threatening emergencies, access to tribal lands, exercise of treaty rights, law enforcement, and select military activities.

Enforcement can be found in OCNMS 2011 Management Plan Goal E, "Maintain the sanctuary's natural biological diversity and protect, and where appropriate, restore and enhance sanctuary ecosystems" under Objective 3. The Sanctuary Operations Action Plan also lists permitting and consultations, voluntary compliance, and enforcement and incident response.

Across the West Coast Region, enforcement priorities rated "high" include discharging or depositing any materials injurious to sanctuary resources, and vessels that ground or sink within the sanctuary. Medium priorities include unlawful removal or possession of historical artifacts, or protected marine resources. NOAA's Office of Law Enforcement (OLE), within

NOAA Fisheries, is the main enforcement entity for ONMS. The National Marine Sanctuary Act is only one of the many laws OLE enforces, with the majority of their enforcement spent on Magnuson-Stevens Act, Lacey Act and Endangered Species Act. Dayna Matthews, NOAA-OLE is the Enforcement Coordinator for West Coast Division, covering CA, OR and WA. He serves as the PFMC liaison, sanctuary and advisory council liaison and is involved in training USCG staff who help enforce sanctuary regulations. Olympic Coast law enforcement staff include a special agent based in Lacey and a recently-hired law enforcement officer to be stationed in Westport beginning this summer. NOAA General Counsel Enforcement Section (GCES) also hosts an enforcement section, with an attorney based in Seattle who works with OCNMS.

The Law Enforcement Technical Advisory Committee (LETAC) meets twice a year to review the past year's enforcement activity and plan for the current year. OLE, WDFW, USCG and OCNMS are members of the advisory and operational forum. George highlighted the various enforcement priorities in the region and well as the Joint Enforcement Agreements (JEA) priorities in OCNMS. When OCNMS becomes aware of a violation, OCNMS notifies OLE and requests an investigation. Once OLE completes the investigation, they forward to GCES for case review and decision on appropriate action.

George's presentation can be accessed online at:

http://olympiccoast.noaa.gov/involved/sac/ac_enforcement_032017.pdf.

Sanctuaries Joint Call to Action on Enforcement in ONMS— Lee Whitford discussed a joint letter on enforcement in sanctuaries, which was proposed by an Enforcement Discussion Panel originating from discussions at the National Advisory Council Chairs Summit in 2016. The joint letter was proposed to OCNMS advisory council's for consideration and vote at the January meeting, where members voted not to sign the letter but agreed to review and reconsider after a second discussion and briefing on current enforcement program at the March Advisory Council meeting.

The letter emphasizes the importance of the National Marine Sanctuaries Act as one of the statutes that NOAA has a responsibility to enforce, and highlights the need for Joint Enforcement Agreements with coastal states to include specific funding for enforcement operations at sanctuaries. Also highlighted is the need for Enforcement Officers from the NOAA Office of Law Enforcement assigned to sanctuary sites. The letter also proposes that advisory councils support and assist, such as helping to educate ocean users about sanctuary regulations, providing input on sanctuary enforcement priorities, and having NOAA enforcement staff member participate at advisory council meetings.

Mike Barton motioned for OCNMS to sign the joint letter of enforcement as drafted, given that there was not an option to edit or amend the letter. Joel Kawahara seconded and discussion ensued. Overall there were mixed feelings about the letter; on one hand, there was a desire to support other sanctuaries, but a feeling that enforcement might not be the highest priority to raise given the focus of the current administration. Given that a new NOAA Administrator has not yet been appointed, some members questioned the timing for raising

this issue and also that it does not reflect the highest priorities for OCNMS. While the OCNMS AC feels that protection of sanctuary resources is very important, they believe that enforcement was only one of many tools that could be used to achieve resource protection.

Other discussion points raised included OCNMS's unique situation with four coastal treaty tribes that involve tribal enforcement, an issue not reflected in the letter. After discussion, Quinault Indian Nation chose to abstain and the Makah Tribe did not wish to support the motion to sign the joint letter. OCNMS advisory council operates by consensus, so without tribal support other representatives did not support the motion to sign the letter. While some members expressed concern about how it would be perceived to be the only site not to sign the joint resolution, overall consensus could not be achieved.

Therefore after significant discussion and consideration, the motion to sign the joint letter on enforcement was withdrawn. The decision to not endorse the joint enforcement letter was reached by full AC member consensus.

The joint enforcement letter can be found online at:

http://olympiccoast.noaa.gov/involved/sac/ac_enforcement_discussion_panel_letter_1116.pdf.

OCNMS 2016 Field Season and Data Management Report– Nancy Wright, OCNMS, highlighted data management results from the 2016 field season in the following program areas: Seafloor Mapping, Coastal Habitats, Wildlife Research, Oceanography, and Citizen Science. Major highlights from 2016 included ship time on two NOAA research ships to begin research that will continue in the 2017 field season. NOAA ship Rainier collected acoustic multibeam data for approximately 200 nautical square miles of Quinault Canyon in an effort to begin mapping the largest of the offshore mapping priorities identified during the Washington State Marine Spatial Prioritization process. Subsequent work on the E/V Nautilus last summer allowed for ground-truthing and limited ROV surveys of the mapped Quinault Canyon rim and produced remarkable videos of sediments and marine life.

Annual intertidal monitoring at Point Grenville (Quinault Nation) and Kydikabbit Point (Makah Nation) continued, following protocol developed by the USGS Multi-Agency Rocky Intertidal Network (MARINE) partnership. For the second consecutive year, research divers from NOAA Northwest Fisheries Science Center joined OCNMS in conducting subtidal dive surveys along the outer Washington coast. Dives focused on documenting nearshore biological communities in kelp beds at five locations (Destruction Island, Cape Johnson, Cape Alava, Tatoosh Island, Neah Bay). Weather and vessel conditions only allowed for one of four scheduled seabird surveys to take place, but it generated useful data. These surveys provide rare data for the offshore distribution of seabirds, including aggregations that form at the productive waters over the Juan de Fuca Canyon. U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, OCNMS and others conducted the annual sea otter census, with concurrent ground surveys at Norwegian Memorial and Bluff Point to ground truth aerial counts completed by biologists. This was the fifth year that OCNMS citizen science volunteers used NOAA Marine

Debris Program protocols, counting, characterizing and measuring and marine debris on various beaches on the outer coast and Strait of Juan de Fuca.

Alisha Friel, OCNMS Vessel Operations Coordinator, provided a brief report on the 2016 field season of Research Vessel (R/V) *Tatoosh*, its 22nd season of operation. OCNMS staff deployed and serviced 10 moorings from Makah Bay to Cape Elizabeth for a total of 18 days at sea. It was the *Tatoosh*'s 16th year collecting data on dissolved oxygen, conductivity, turbidity, currents and water samples for Harmful Algal Blooms (monitoring). The field crew spent two days ground-truthing bottom samples from previous data for habitat mapping due to problems with the multibeam. OCNMS hosted videographers from ONMS headquarters for two days and facilitated dives at Cape Alava and *Tatoosh* Island to capture video for the "Earth Is Blue" social media campaign. Two days of whole water sampling was conducted aboard NOAA Ship Ron Brown at locations offshore and in the Olympic National Park intertidal zone in an effort to get a more comprehensive picture of cross-shelf differences in ocean chemistry. Partner projects involved servicing the Cape Elizabeth buoy (1 day), recovering the PMEL acoustic mooring for southern resident killer whales (3 days), and kelp sampling (5 days) with Cathy Pfister, a researcher from University of Chicago.

Alisha noted that the *Tatoosh* experienced a major breakdown of the port engine with in the season. *Tatoosh* was out of commission for all of September until a remanufactured port engine could be installed. This resulted in missing a mooring servicing and therefore lost data. OCNMS also had to cancel a seabird survey, school field trip and volunteer cruises due to the breakdown. She gave an overview of 2016 sanctuary field operations, which entailed 35 days at season (down from 51 days in 2015) totaling 130 project hours (down from 344 hours in 2015). Most of R/V *Tatoosh*'s field time was dedicated to the oceanographic moorings (51%) and project partner work (26%), followed by habitat mapping (10%), seabird survey (7%) and outreach (6%) of total time. Overall, long-term monitoring research projects were maintained and OCNMS was still able to continue innovative partnerships partnership with other research entities. She thanked Quileute Department of Natural Resource and other volunteers who assisted OCNMS during the field season.

Nancy's presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/fieldseason_nancywright_2016.pdf.

Alisha's presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/field_season_tatoosh_alishafriel_2016.pdf.

You can also refer to the following informational summary documents:

http://olympiccoast.noaa.gov/involved/sac/research_monitoring_summaries2016.pdf and http://olympiccoast.noaa.gov/involved/sac/2016_ocnms_vessel_accomplishment_report.pdf.

Public Comment– None at this time.

Karlyn shared a short video produced by Office of National Marine Sanctuaries on Remotely Operated Vehicles (ROV) at Thunder Bay National Marine Sanctuary in Alpena, Michigan (www.youtube.com/watch?v=dcF9V_KClKA&feature=youtu.be). The video gives context about the value of technology and ocean science and importance in rural communities. This year OCNMS will host the first Olympic Peninsula ROV competition on May 20 in Forks.

Report on OCNMS Small Vessel Incidents and Response— George provided a briefing on tracking vessel incidents since 1994, which primarily include vessels that resulted in sanctuary violations (oil spills, sinking or grounding within the sanctuary). Other information tracked included near misses, because a big concern in Washington State prior to sanctuary designation was oil spills, including the 1988 *Nestucca* spill in Grays Harbor, followed by the 1991 F/V *Tenyo Maru* spill.

George referred to the *Review of Olympic Coast Vessel Incidents from 1994-2016* report which focuses on small vessel incidents. Out of all 100 vessel incidents in the OCNMS database, there were 34 near misses, 26 sunken or grounded vessels that were not salvaged, 20 salvaged sunken or grounded vessels, 11 spills and 9 cases of submerged debris. To obtain this information, OCNMS searched U.S. Coast Guard data, NOAA OLE investigative reports, WDOE data (two sources), National Transportation Safety Board's accident reports, and Canada Marine Investigation reports. George looked for similarities between incidents and characteristics of the vessels involved and summarized information on based on 1) incident type (collision, fire/explosion, flooding, grounding), 2) incident cause (equipment failure, external conditions, human error, unknown), 3) age lost, 4) vessel length, 5) hull type, and 6) time of year.

George highlighted some of the data, comparing fishing vessels to private vessels. For incident type, flooding made up nearly half of all incidents (48%). Fishing vessels incidents were nearly evenly split between grounding (48%) and flooding (44%), whereas private vessels predominantly experienced flooding (55%). For incident causes, there are more unknowns since the data is retrieved from secondary sources. If a cause could not be identified, it was characterized as "unknown". For fishing vessels human error was the main cause (48%). For private vessels 65% of the incident cause were unknown, and 30% were caused by external conditions. He noted that additional information and subject matter expert review could help describe the cause better. Evaluating the age of lost vessels was difficult, as there is not an overall age population for vessels to use as a basis for comparison. The greatest number of vessel incidents occurred within a vessel length range of 30-49 feet (20 of 46 vessels), with an average of 53.8 feet for fishing vessels compared to 37.6 feet for private vessels. In general, fishing vessels tend to be larger than private vessels. Greater differences emerged for vessel hull type, with steel representing the majority of fishing vessels (65%), and private vessels having hulls made of fiberglass (45%) and wood (30%).

For vessel incidents that were salvaged (43%), George categorized them as intact grounded (10 vessels), compromised grounded (6 vessels), flooded yet floating (3 vessels) and sunken (1 vessel). OCNMS also identified the location of lost vessels when possible. Of the five surveys,

two were successful. These surveys resulted in the *Vicious Fisher* and *Milky Way* wrecks being plotted on NOAA charts. George summarized the general characteristics for lost vessels in OCNMS, comparing fishing vessels and private vessels.

OCNMS is proposing the formation of a Vessel Incident Working Group to evaluate what, if anything, OCNMS can do to help mitigate against future occurrences of lost vessels in the sanctuary. They also hope to locate and chart shipwrecks and consider policy options. All sanctuaries in the West Coast Region are working to collect similar information given the management implications and prohibitions against abandoning structures within sanctuaries. John Veentjer, Allison Mahaney, Joel Kawahara, Josh Peters, Jen Hennessey (or WDOE representative) and U.S. Coast Guard volunteered to serve on the Vessel Incident Working Group. Anyone interested in joining can contact him at George.Galasso@noaa.gov.

George's presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/oc_vessel_incident_032017.pdf and the report he referenced is located at:

http://olympiccoast.noaa.gov/involved/sac/ocnms_incident_2_24_2017_lowres.pdf.

Quileute Department of Natural Resources Overview— Jennifer Hagen, Quileute Tribe Marine Biologist, provided an overview and updates of Quileute Department of Natural Resources. The main objective is to ensure the Tribe's treaty rights, which enable them to manage and protect their natural resources—from fish to cedar bark—for future generations. The Natural Resource Committee consists of 7 elected members, who make policy and decisions which are forwarded to the Tribal Council, the ultimate authority. Staffing consists of a Director, Deputy Director, 3 administrative support, 11 professionals in environmental science, 3 wildlife and fisheries enforcement staff, and 7 technicians. The main program areas consist of fish management, timber fish and wildlife management, hatchery production, water quality monitoring, marine program, enrollment, and enforcement.

For marine species management, they work on management plans with other tribes and PFMC. They look at ESA and critical habitat listings, conduct stock assessments, harvest allocation and regulation development. The Timber, Fish and Wildlife program monitors the health and populations of targeted wildlife, eradicates noxious weeds, manage and assist with harvesting of cedar bark, conduct archeological surveys and wetland surveys. They have also been surveying lands to allow tribal buildings to be moved to higher grounds; they look to identify significant artifacts or habitats. During the springtime, tribal members harvest cedar bark from the trees. The Quileute hatchery rears chinook and steelhead, collaborating with WDFW. Water quality monitoring is conducted along various streams and rivers, collecting data on turbidity, oxygen, pH, flow, temperature, conductivity and macroinvertebrates. The Marine Program surveys forage fish, marine debris and derelict gear, Harmful Algal Blooms (HABs) monitoring and more. She, Greg Urata and Rio Foster have been trying to identify the locations on the beach where forage fish (night smelt and surf smelt) are laying their eggs. Their marine debris project to remove derelict crab pots is funded by NOAA Marine Debris Program through The Nature Conservancy. They attempt to salvage as many as possible, or recycle some of the

materials like metal and line from the removed crab pots. Quileute harvests for shellfish and other species conducted two per month during low tides samples for HABs (diarrhetic, paralytic and amnesic shellfish poison) along with water quality parameters. During periods of high domoic acid levels, the Quileute fishing fleet also assists by sampling crabs as assisting as necessary with water sampling. They also stay up to date with training and collaboration with other entities on HABs monitoring so that samples collected from different entities are comparable. Opportunities for partnership have included Northwest Association of Networked Ocean Observing Systems (Cha'ba buoy), participating on University of Washington's cruises aboard R/V *Thompson*, OCNMS's seasonal mooring program, NOAA's *Bell Shimada* for sardine and hake surveys with HABs, UW APL and NOAA's Environmental Sample Processor and more.

Jennifer's presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/quileute_dnr_ocnms_ac_march2017_jhcompressed.pdf.

Superintendent's Report – Carol referred council members to the March 2017 Office Report for updates on sanctuary activity in the past two months, which can also be found online at:

http://olympiccoast.noaa.gov/involved/sac/office_report_031717.pdf.

1. It is still very early in the FY17 budget allocation and decision process. Congress has not approved a budget yet, so Carol will have more information once OCNMS receives its budget.
2. The annual Washington Coast Cleanup is on Saturday, April 29 this year instead of falling on Earth Day. Rain Fest's River and Ocean Film Festival will follow in Forks.
3. OCNMS will be hosting the film, "A Plastic Ocean" in Port Angeles and Port Townsend, followed by panelist discussions. Dates and locations will be distributed once final details are solidified.
4. Jim Delgado, ONMS Director of the Maritime Heritage Program, will be presenting on recent shipwreck discoveries in Port Angeles on March 30 at 6pm. Jim is a dynamic speaker, so you do not want to miss it.
5. John Armor, ONMS Director, will be visiting Olympic Coast at the end of April. He will be meeting with the Intergovernmental Policy Council, Makah Tribe, OCNMS staff, and participating in the WA Coast Cleanup.
6. Liam Antrim will be retiring on March 31. Council members are welcome to celebrate his time with OCNMS that evening in downtown Port Angeles at Metta Room at 4-8pm. Currently OCNMS does not have the funds to rehire his position, so George will take over his permitting duties on an interim basis.
7. The research team is planning for the 2017 field season, which will include participation on two NOAA cruises, *Rainier* (habitat mapping) and *Nautilus* (16 ship days).
8. EcoAdapt of Bainbridge Island submitted a grant to NOAA Coastal Resilience Program to conduct a climate change adaptation process for the outer coast. Carol thanked council members who wrote support letters for the grant application. The process would involve a rapid assessment to go through the vulnerability of resources and habitats to climate change, and to determine adaptations and mitigation strategies.

9. Recent news has highlighted the vulnerability to Dungeness crab to ocean acidification and the cascading effect on the food web and ecosystem.

Member Reports and Future Agenda Topics

- Jodie Toft and The Nature Conservancy are working to acquire funding through the state legislature for Washington Coast Restoration Initiative. They are asking for \$12.5 million, which went through the Governor's budget, for restoration and job creation. TNC has also developed a WA Coast Works program, for small entrepreneurial projects that focus on sustainability.
- Mark Ozias noted that his colleagues are very interested in learning more about climate change, so he is putting together a series of informational sessions for the Clallam County Commissioners over the coming months. Anyone concerned about funding for natural resources should not hesitate to reach out to County Commissioners.
- Katrina Lassiter mentioned that the Olympia chapter of Surfrider Foundation will be hosting a cleanup this Saturday in conjunction with WA Coast Cleanup at Pacific Beach and they will be able to recycle some of the plastic debris collected.
- Tom Mumford shared that press dried seaweeds specimens will be going into the Burke Museum Herbarium. They provide a record of specimen and are included in a database. DNA can be extracted from samples and used by the scientific community.
- Joel Kawahara stated that the Pacific Fishery Management Council Habitat Committee is putting together information on the EPA general discharge permit previously discussed at OCNMS Advisory Council meetings. A draft permit to be released by EPA is still pending. PFMC will discuss it at the April meeting in Sacramento. This year's projections for coho salmon are more positive based on the out-migrant population 3 years ago. Otherwise they expect somewhat normal numbers in the Columbia River and Puget Sound, with two populations doing quite poorly (Skagit and Snohomish). Chinook populations should be better, but still not great numbers. Sea conditions are improving as water temperatures have cooled post-blob. WDFW is working to get new legislation for their hydraulic permit applications in nearshore habitat.
- Joe Schumacker showed photos of the iconic "elephant rock" structures at the mouth of Raft River which crumbled over the winter due to storm activity.
- Rich Osborne announced the upcoming North Olympic Coast Marine Resources Committee meeting on Tuesday with a presentation from Global Ocean Health on ocean acidification. MRC is submitting their comments on the Marine Spatial Plan draft, which is expected to be released for public review in May.
- Allison Mahaney reported hearing debate about the issue of removing dams in various community groups she is involved with. This week the local Port Angeles radio station produced a set of interviews on dams in the lower Columbia and the impact on salmon and fisheries. One concern is that migrating marine mammals will be drawn there in search of food.
- Jennifer Hennessey stated that there is a preliminary (informal) draft of the Marine Spatial Plan for advisory council members and tribes to review, posted on their website. Mid-May is their target for releasing the draft to the public, which will incorporate the

initial feedback. The next Washington Coastal Marine Advisory Council is May 10 in Aberdeen at the Port of Grays Harbor. The Governor's office and other states have worked to establish an International Ocean Acidification Alliance, looking for sub-national and affiliates to come together to raise the profile on OA. Each entity would develop an OA Action Plan. The Marine Resources Advisory Council is meeting today to update the Washington State's Blue Ribbon Panel Report on Ocean Acidification. The three West Coast states with NOAA OA Program are working on an inventory of monitoring assets relevant to ocean acidification. The Joint Ocean Commission Initiative published a priority paper on ocean policy issues for Congress; the Governance Coordinating Committee is wrapping up their policy priorities paper to advise the new federal administration.

- Jennifer Hagen provided additional information on the followed up on the EPA offshore discharge permit. There have been a series of letters that have come in since our last meeting from Oregon and Washington that she will share with council members. EPA's delay in releasing the draft permit for public review allows everyone to become more educated about the topic.
- Carolyn Winters thanked Jennifer and Quileute Tribe for hosting today's meeting. She emphasized that anyone with questions on US Navy activities can contact her for information.
- Dan Ayres shared that the Pacific States Marine Fisheries Commission will hold a workshop at the end of the month in Portland. They will address practical and productive ways for crab fishermen to avoid whale entanglement. Razor clam populations assessed at Kalaloch show reductions in population density, probably due to increase in erosion, sea otter predation, and other natural factors. All recreational clam digs have been closed for the foreseeable future. Other beaches have healthy razor clam populations.
- Dana Sarff of Makah Tribe noted that they have recently held a climate change awareness event and dinner to kick off climate change planning efforts for the Makah Tribe, with strong attendance. They are tabulating results from the surveys conducted, wrapping up report on climate change literature and completed sea level rise mapping. Makah's Environmental Health Program is working closely with WDOE on a recycling project, removing more than 200,000 tires. They are also moving forward on a partnership with University of Washington with MERHAB to conduct Harmful Algal Blooms collection and monitoring. They are concerned with potential reductions in federal funding to EPA as some of their programs are funded by EPA.

The next OCNMS Advisory Council meeting will take place on **Friday, May 19th** in Neah Bay at the Makah Marina.