

OLYMPIC COAST
NATIONAL MARINE SANCTUARY
Meeting Minutes

OCNMS Advisory Council Meeting
March 25, 2016

Elwha Klallam Heritage Center
Port Angeles, WA

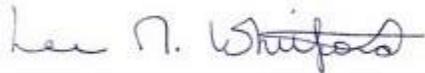
Olympic Coast National Marine Sanctuary
NOAA, Office of National Marine Sanctuaries
115 E. Railroad Avenue, Suite 301
Port Angeles, WA 98362-2925

Reviewed by OCNMS Superintendent:



Carol Bernthal, Superintendent

Approved by AC Chair:



Lee Whitford, Chair

Advisory Council (AC) Members/Alternates in Attendance: Lee Whitford (Education, Chair), John Veentjer (Marine Industry, Secretary), Jodie Toft (Conservation), Katrina Lassiter (WDNR), Casey Dennehy (MRC), Captain Brian Gilda (USCG), Mark Ozias (Clallam County), Steve Shively (Tourism and Economic Development), Joel Kawahara (Fishing), Jan Newton (Research), Jennifer Hagen (Quileute alternate), Jennifer Hennessey (WDOE), George Hart (US Navy), Bob Boekelheide (Citizen at Large), John Stadler (NOAA-NMFS), Jennifer Brown-Scott (USFWS), Mike Barton (Education alternate), Tom Burlingame (Fishing Alternate), Josh Peters (WDNR alternate), Rich Osborne (MRC alternate), Stephanie Sleeman (US Navy alternate),

Presenters and Others in Attendance: Dawn Grebner (US Navy), Judith Morris (representing Congressman Kilmer), Howard Sprouse (citizen), Diana Somerville (citizen)

NOAA/OCNMS Staff in Attendance: Carol Bernthal, George Galasso, Liam Antrim, Kevin Grant, Nicole Harris, Jacqueline Laverdure, Kathy Hough, Karlyn Langjahr (OCNMS)

Suzie Bennett, Manager of Elwha Klallam Heritage Center, welcomed all council members to the Heritage Center and Port Angeles. She invited council members to visit the exhibit of artifacts from their ancestral village of čixʷícən.

Chair Lee Whitford called the meeting to order and reviewed the goals and purpose of the Advisory Council per its Charter.

Adopt Agenda – Lee noted that there was a last minute cancellation of the presentation on Elwha Klallam Heritage and čixʷícən Ancestral Village. As a result, George Galasso is stepping in to present on the OCNMS Vessel Incident Database. The draft agenda was adopted with these changes noted. ***It was passed by full AC member consensus.***

Internal Affairs:

Approval of January 2016 IPC-SAC Joint Meeting Minutes – There were no proposed edits or changes to the Joint Intergovernmental Policy Council and Advisory Council meeting minutes. ***Steve Shively motioned to approve the meeting minutes without changes and Mark Ozias seconded. There was no further discussion and motion passed by full AC member consensus.***

Approval of January 2016 SAC Meeting Minutes – There were no proposed edits or changes to the Sanctuary Advisory Council business meeting minutes. ***Joel Kawahara motioned to approve the meeting minutes without changes and George Hart seconded. There was no further discussion and motion passed by full AC member consensus.***

Ocean Acidification Sentinel Site Working Group Draft Charter– Lee Whitford, Chair of Ocean Acidification Sentinel Site (OASeS) Working Group, noted that the group has held two meetings to date. Members include Casey Dennehy (Vice-Chair), Jan Newton, George Hart, Jennifer Hagen, Steve Fradkin and Jennifer Hennessey. The overall goal of the OASeS Working Group is to help develop and plan a workshop to assist OCNMS in becoming a sentinel site for ocean acidification. The workshop will take place with local and regional partners, co-hosted by Office

of National Marine Sanctuaries and NOAA's Ocean Acidification Program (OAP). The purpose of the workshop is to determine the scope and scale of ocean acidification relative to OCNMS, and to develop the scope of work for OCNMS as a Sentinel Site. The workshop will address how Olympic Coast can improve monitoring to better characterize OA in the sanctuary, and discuss what it would take to achieve this, to help inform sanctuary management decisions and utilize for outreach/education efforts. Currently this is no NOAA or sanctuary sentinel site for ocean acidification, so Olympic Coast could serve as a pilot for this topic in the national marine sanctuary system.

Lee shared the OASes Working Group Draft Charter and Kevin Grant of OCNMS discussed the potential dates for late August or September, and progress on developing a participant list. The workshop would convene between 30-40 people who work in the OA realm and determine what OA means for Olympic Coast specifically, to capture a more comprehensive story. Funding of the workshop will come from ONMS and OAP. The OASes Working Group will reconvene after the workshop to refine the purpose and task(s) based upon the results of the workshop, looking to identify short- and long-term actions, including those implementable within a year.

Bob Boekelheide motioned to approve and adopt the OASes Working Group Charter and Jodie Toft seconded the motion. There was no further discussion and motion passed by full AC member consensus.

AC Charter Renewal 2016 – Lee noted that the Advisory Council Charter was last updated in December 2011, so will be up for renewal at the end of this year. Carol stated that we do not anticipate major changes this year, and that Karlyn is keeping track of potential changes or additions. The Executive Committee will present proposed changes to the council at the July or September meeting, unless changes are significant enough to warrant a Subcommittee. Council members with ideas or suggestions can contact Karlyn.

Port Angeles Downtown Museum Walking Tour – Karlyn announced that OCNMS has partnered with several other downtown natural and/or cultural resource exhibits to create a walking tour rack card. Downtown partners include Elwha Klallam Heritage Center, Feiro Marine Life Center, and Museum of the Carnegie. They have expanded the concept to include Olympic National Park's Visitor Center and the Port Angeles Fine Arts Center for visitors willing to walk greater distances. The rack card will feature a map of the locations with a brief description and photo of all sites, including contact information. OCNMS and partners plan to launch the rack card in May before the tourist season ramps up.

Information Items:

OCNMS Vessel Incident Database– George Galasso presented a project that he has been working on for several years. Since the sanctuary was designated in 1994, OCNMS has been collecting various type of information on vessel incidents occurring in the sanctuary. The vessel incident review included: types of incidents tracked, database, categories, location/time

period, sample plots and examples. In early years, OCNMS collected data on sanctuary regulation violations, such as low overflights and vessel discharges, sinkings and groundings. They also noted vessel near misses and created a separate database on maritime heritage resources. The incident database currently includes around 400 entries, of which 100 are related to vessels. This later category is what is being analyzed. Categories include all vessels that sink or ground in, or near the sanctuary (and whether they were salvaged or not); all prohibited vessel discharges in the sanctuary; discharges outside the sanctuary if the discharge subsequently enters and injures sanctuary resources; near misses for large commercial vessels; and significant submerged marine debris.

Vessels incidents are entered into the database if they occur inside or adjacent to the sanctuary (within 10 nautical miles), excluding the marinas of La Push and Neah Bay. OCNMS is currently considering whether to extend the 10 nm buffer when considering large vessel near-misses. OCNMS's database on Maritime Heritage Resources includes shipwrecks of historical significance (50+ years old); while there are many entries, accurate locations are none on only a few. The incident database goes back to July 1994 and would ideally consider additional incidents from 1960s to 1994, vessels that would not be considered historical by age. George displayed various maps of 100 records of shipwrecks in the database, of which 82 occur within the sanctuary (or 10 nm). Location is classified as either a confirmed location, specific location or general location.

Samples plots included near miss incidents, sanctuary violations that did not lead to a vessel sinking/grounding; sinkings/groundings in which the vessel was salvaged; and those in which the vessel is still underwater. George gave several examples of incidents that have occurred in the sanctuary and described the next steps OCNMS will take, which includes: 1) reviewing records with US Coast Guard, WA Department of Ecology and NOAA Office of Law Enforcement to add more detail into existing database and standardize information collected, 2) analyzing the causes and responses for each incident; 3) locating shipwrecks (when possible) using the R/V *Tatoosh* high resolution bathymetry system since OCNMS does not have access to a side scan sonar, 4) working with Office of Coast Survey to add chart notes to nautical charts, 5) using information to help make policy decisions.

George's presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/database_vessel_incident_galasso_3_24_2016.pdf.

Sentinel Site for Ocean Acidification – Shallin Busch, Pacific Northwest representative of NOAA's Ocean Acidification Program (OAP), presented an overview of their program and work on ocean acidification (OA). She explained how the ocean's acidity is increasing due to the ocean's uptake of atmospheric carbon dioxide (CO₂), and that pH could increase by 100-150% by the end of this century, a rate that is 10-100 times faster than any time in last 50 million years. This poses a challenge ecologically, because many marine organisms are sensitive to changes in pH (acidity). Our upwelling system brings up cold, nutrient-rich, high CO₂ and low pH waters to the surface. The combination of naturally acidified deep waters is exacerbated by anthropogenic acidity at the sea surface. Estuary systems have more nutrients, which tend to

be heavier and increase phytoplankton blooms. As the phytoplankton blooms die, it creates a bacteria bloom in response. As bacteria respire CO₂, lower oxygen conditions occur in addition to CO₂, and scientists have observed this dramatically in places like the Puget Sound. There are different potential effects of OA on various organisms, such as increased fertilization of eel grass, reduced growth patterns in calcifying species, and behavioral and nervous system changes in fish, crustaceans and shellfish. Over time, as more OA studies have been conducted, scientists are finding more robust and predictable results. It is still a very young branch of research. The complexity of marine food webs means that organisms not directly affected by ocean chemistry can be indirectly impacted by their food source or habitat.

Shallin highlighted OA efforts nationwide and regionally. At the federal level, an interagency working group on OA is seeking to sustain a healthy marine and coastal ecosystem, communities, and economies through informed response to OA. The group produced a *Strategic Plan for Federal Research and Monitoring of Ocean Acidification*. NOAA's OAP addresses six themes: monitoring, biological and ecosystem response, data management, modeling, adaptation strategies and education and outreach. The OAP Observing Portfolio assesses the current state and development of OA to better understand the spatial and temporal variability in ocean chemistry and driving processes. They also produce validated maps, meta data and underlying data in support of long-term record of dynamics and processes controlling OA on the coastal shelves. Nationally, a Global OA Observing Network showcases OA-related efforts and assets. Trends in pH and aragonite saturation tend to be more dynamic and variable in coastal environments compared to open ocean systems. OCNMS is covered geographically in J-SCOPE efforts to model and forecast OA.

The Northwest Fisheries Science Center (NWFSC) is also working to understand how physical, chemical, biological and ecological processes interact in our region for decision-making processes and management. This is done through laboratory experimentation, field work and modeling. The NWFSC laboratory in Mukilteo can manipulate carbon dioxide, oxygen, and temperature together to create conditions experienced by species in the California Current ecosystem. They have published studies on organisms such as pteropods, Pacific krill, Dungeness crab and are conducting experiments on other species including Coho salmon, sablefish, copepods, geoduck, China rockfish, squid and more. Other current efforts including a meta-analysis to understand species response to OA, to then map on an ecosystem scale to determine what happens to other species impacted beyond the calcifying organisms. Studies use para-data sets of chemistry and biology together, to better understand how species are exposed to different levels of OA and potential future levels. Education and outreach efforts involve collaboration with Channel Islands National Marine Sanctuary to host a webinar series called "Sharing Ocean Acidification Resources for Communicators and Educators" (SOARCE), with approximately 1,100 participants to date in its third year. Past webinars can be accessed online. ONMS and OAP partnered on a needs assessment to develop a NOAA Ocean Acidification Education Implementation Plan. They are identifying the gaps to determine what types of mini-grants should be offered.

Liam Antrim, OCNMS, followed with an introduction of the concept of a sentinel site and what that would mean for Olympic Coast. Liam shared existing NOAA Sentinel Site Programs that focused on climate change, specifically sea level rise and coastal inundation. Initially funded in 2012, the program exists in five locations (San Francisco Bay, Chesapeake Bay, North Carolina, Northern Gulf of Mexico, and Hawaiian Islands) associated with the National Estuarine Research Reserve System with the exception of HI. The concept is to have a place-based and issue-driven approach, putting global issues into a local focus. Sentinel sites leverage existing assets, resources, partnerships and facilitate greater engagement of collaborators to improve coordination and planning of the efforts. Sentinel sites are defined areas for sustained observation/study, with monitoring to inform management by increasing understanding of ecosystem and signal early warnings of change. Sentinel sites imply increased monitoring and data collecting, but can be applied to NOAA's larger mission of using science to support service and stewardship. National marine sanctuaries are already place-based sites focused on collaboration and long-term monitoring for ecosystem health, with the goal of protecting important places while still allowing people to access and enjoy them. OCNMS launched a website (<http://sanctuaries.noaa.gov/science/sentinel-site-program/>) to explore ten major issues within the sanctuary system. Existing infrastructure and long-term data at OCNMS facilitate an Ocean Acidification Sentinel Site, along with it being part of the California Current Ecosystem. Its location at the entrance of the Salish Sea, the influences of the Juan de Fuca Eddy, and placed based ties to the ocean lend well to monitoring of OA impacts.

By establishing a sentinel site for OA, OCNMS hopes to track early warning indicators for appropriate responses, to better understand ecosystem processes and the state of its natural resources, to attract collaborators and improve information flow, and to integrate and enhance existing education and outreach efforts to better inform the public.

Shallin's presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/noaa_oceanacidificationprogram_3_24_16_busch.pdf and Liam's can be accessed at: http://olympiccoast.noaa.gov/involved/sac/oceanacidification_sentinelsite_3_24_16_antrim.pdf.

Public Comment– Diana Somerville inquired about the U.S. Navy's electronic warfare training and whether OCNMS was monitoring within the sanctuary. George Hart clarified that rules and regulations do not allow U.S. Navy to drop ordinances in the sanctuary. She expressed her concern for ordinances dropped within the vicinity of the sanctuary, to which George replied that the majority of their activity occurs 50 nm or further off shore, well outside the sanctuary. Diana asked if there were monitoring efforts to understand the sonic impacts on marine wildlife. The U.S. Navy submitted their data to NOAA from hydrophonic buoys off the coast measuring migratory whales' responses. Carol informed her that a noise monitoring buoy was deployed just outside of the sanctuary in 2014 that can capture and characterize the sound scape in the vicinity of sanctuary. This was part of an ocean noise monitoring effort to better characterize the baseline level of noise. Other specific locations have been targeted for

potential impacts on marine mammals and other animals. That information is provided to National Marine Fisheries Service to compile and review for their own management decisions.

Social Media for Citizen Engagement and OCNMS Social Media Efforts – Steve Shively, Media Coordinator for Jefferson County Tourism Coordinating Council, presented an overview on the goals of social media, with an overall approach to engage people at a level that inspires action. He explained the four traditional marketing mechanisms: paid media, owned media, shared media, and earned media. Steve highlighted an example of earned media, when a valuable media piece features your desired social media platform as part of a story or highlight. He gave an overview of the most popular social media sites and their main differences, and how they can send out unlimited impressions for free. As a result, the four classic marketing mechanisms have collapsed into three, with the shared media existing in each of the other three orbits. Ultimately, media marketing aims to go beyond just raising awareness (exposure), generating interest (exposure) or desire (engagement) by spurring action (conversion) at the most evolved level. The case of the film *Blackfish* demonstrates the power that social media awareness can have on altering company policies; SeaWorld just announced that it would discontinue captive breeding of orcas and their performance shows.

Nicole Harris, OCNMS Education Specialist, shared social media efforts at the national and site level. Office of National Marine Sanctuary launched the #EarthIsBlue campaign in October 2014 on the system's 42nd anniversary. They have posted one photograph daily and one video each week, drawing from each of the 14 sites in ONMS. As a result of this campaign, the national Facebook account increased its following by 435% to ~71,000 followers, bolstered its Twitter base 66% up to ~53,000 followers. An Instagram account was created at the onset of this campaign with 12,000 followers to date. After its first successful year of drawing the public's attention to national marine sanctuaries, the overall strategy expanded to identifying things citizens can do, and interact more with public members by having them share their own photos of sanctuaries. Nicole highlighted several of the #EarthIsBlue photos from Olympic Coast, with its branded logo.

Recent research and experience show, however, that print material is not dead. A study found that people are more willing to spend money, engage in volunteer work, or make time for something after reading print material versus social media. ONMS is releasing a pilot magazine to serve as a glossy, appealing yet informative publication at Capitol Hill Ocean Week (CHOW) in June 2016. They will evaluate responses to the magazine, with the hope of it becoming an annual publication.

OCNMS launched its Facebook page in 2010 and Twitter in 2014, with 9,714 and 469 followers respectively. Nicole shared that 46% of Facebook followers are from outside the United States, with top countries spanning the globe, which makes a local call to action challenging. She defined the most common terminology on social media used by OCNMS, and explained the power of reach when followers share a post to members of their social media communities. Nicole shared some of the more successful posts, such as trivia and facts paired with a beautiful or intriguing image, celebrating nationally (or internationally) recognized days. OCNMS also

uses social media to promote local events such as beach cleanups, speaker series or others. This is also where the sanctuary could use help from council members and affiliates to share widely to reach more of a local audience. She highlighted a photo of *Veleva veleva* taken by volunteers that reached 1 million people within a week. Tagging partners or collaborators has also been effective for those that are also using social media, since it opens the visibility of the post up to all of the partners' followers. Twitter is quite different in that posts are much shorter with character limitations, with a shorter life time for visibility. OCNMS has received positive feedback on social media efforts. She encouraged all council members to like/follow the OCNMS Facebook/Twitter pages, tagging when appropriate, and sharing when possible. OCNMS are open to ideas on posts and photos you are willing to share to be posted.

Their presentation can be found online at:

http://olympiccoast.noaa.gov/involved/sac/social_media_engagement_shivelyharris_3_25_16.pdf.

Status of Southern Resident Killer Whales and OCNMS – Lynne Barre, NOAA Fisheries Recovery Coordinator for endangered southern resident killer whales (SRKW), presented an update on the status of our local orcas. Orcas are the most widely distributed mammal on Earth, apart from humans, and have different ecotypes and cultures based on where each population inhabits. In Washington we have three ecotypes: transient killer whales (marine mammal eaters that travel in small groups), offshores (fish and shark eaters that travel in large groups) and residents. Lynne's presentation focuses on our resident orcas, which form stable family groups, prey particularly on Chinook salmon, use sound to locate food and communicate, and have distinct dialects. There are three SRKW pods: J, K, and L. One of their unique behaviors is the greeting ceremony, a time when all orcas line up to greet each other. Individual orcas can be distinguished by their unique saddle patch patterns behind their dorsal fin, and SRKW are well tracked. Currently there are 81 individual, a 20% decline from the late 90s, with their official listing on Endangered Species Act in 2005. Major threats to the health of their population are prey availability, contaminants and vessels and noise. NOAA Fisheries developed a Recovery Plan to support protection of SRKW through research, enforcement, education and adaptive management. Research is conducted with multiple partners on topics related to the main threats, as well as learn more about demographics and genetics.

Lynne discussed each of the three main threats in more detail. Prey availability: Salmon are complex due to their transboundary nature, as well as the fact that some of the salmon are also endangered. Scientific drones are being used to determine when and where orcas' food is limited to help identify ways to prioritize salmon recovery for SRKW. Contaminants: Contaminants in orcas are identified using biopsy samples with skin and blubber to determine types of long-lived environment contaminants (PCBs, PBDEs, etc.). Contaminants cause reproductive and immune problems, and female mothers offload them to their offspring through breastmilk. The Puget Sound Partnership has an Action Agenda to restore Puget Sound by 2020, key habitat for SRKW, using working group output from EPA and WA state agencies. Vessels: Studies on vessels and noise showed that orcas foraging decreased when vessels were present within 400m, with orcas traveling more and using more energy. SRKW also increase

their surface behaviors when vessels are present and in proximity, again resulting in more energy spent. Researchers are trying to understand how energetic demands are impacted by the increased levels of noise from vessel traffic, requiring orcas to communicate more loudly. Vessel regulations were established in 2011 for inland Washington waters based on scientific findings and observations, with a rule to maintain 200 yard distance from a killer whale. Vessels are also prohibited from positioning themselves in the path of a killer whale within 400 yards.

Education and outreach efforts share the campaign “Be Whale Wise” with multiple partners and stakeholders; NOAA enforcement and WDFW have a joint enforcement agreement to increase their presence on the water; continued monitoring on compliance and economic impacts. Other risk factors include oil spills, so the Recovery Plan has an Oil Spill Response Plan as an action. Reporting strandings is important so that scientists can learn about an orca through exams and necropsies to potentially uncover indicators such as disease, human interaction or natural causes. The report, “Southern Resident Killer Whales: 10 Years of Research and Conservation” can be accessed online at: www.nwfsc.noaa.gov/news/features/killer_whale_report/.

Over the next ten years NOAA Fisheries plans to learn more about orca’s winter distribution and diet, model competition from other salmon predators, assess the effectiveness of regulations, conduct health assessments and evaluate coastal critical habitat. SRKW are included on a NOAA Fisheries “Species in the Spotlight”, one of eight identified species at high risk, helping to build public awareness and support for recovery efforts.

OCNMS is part of our resident orcas’ habitat, which ranges from SE Alaska to California. Critical habitat for SRKW was designated in 2006 for the San Juan Islands, Puget Sound, and Strait of Juan de Fuca. Essential features for the orcas in their critical habitat include water quality, prey abundance, and passage conditions. Current projects include satellite tagging of individuals, research cruises, coastal acoustic monitoring, prey species identification and reported sightings. NOAA Fisheries is now compiling data from the past ten years and working on analyses to revise critical habitat; by fall of 2017 they hope to have a proposed rule for public comment. Results from satellite tagging of individual orcas shows that they travel long distances along the coast. In the past year and half, there has been a baby boom with nine or ten orca births, and two known deaths. Researchers wait to count a baby as a new individual in the population for one year. To join the “Orcalist” list serve via email, you can sign up at: www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/email_listserve.html

Lynne’s presentation can be found online at: http://olympiccoast.noaa.gov/involved/sac/southernresidentkillerwhales_3_25_16_barre.pdf.

Public Comment– Howard Sprouse was curious about the awareness and interactions with the upcoming prospect of the military’s intention to increase their area of operations in the sanctuary. He requested council members and meeting participants review the Environmental

Impact Statement for proposed electronic warfare activities. This summer a decision will be made, and he urges people to read the public documents produced by the military and federal agencies.

Superintendent's Report – Carol referred council members to the March 2016 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/officereport_march_2016.pdf.

1. This past week the U.S. Navy Tugboat, *USS Conestoga*, was found in Greater Farallones National Marine Sanctuary. It sank 95 years ago with 56 passengers aboard. The World War I era tug left San Francisco and was heading to American Samoa when it was lost at sea. In spite of the large-scale search made following the wreck, it was the last US Naval vessel that was lost at sea during peace time. In 2009, Office of Coast Survey located a suspected mystery shipwreck, which was confirmed by experts during a site visit in October 2015.
2. Hawaiian Islands Humpback Whale National Marine Sanctuary withdrew a proposal to expand their sanctuary from a single-species approach to an ecosystem-based management system. The withdrawal was based on feedback from public comment processes and State of Hawaii.
3. Lee Whitford was nominated for ONMS 2015 Volunteer of the Year award for her active service as Chair on the advisory council, participation and leadership in working groups, and support of the sanctuary education program. Lee is the Olympic Coast nominee among volunteers from each of the 13 other sites in the National Marine Sanctuary System. The overall volunteer of the year will be announced in June at Capitol Hill Ocean Week.
4. R/V *Tatoosh* is back from the outer coast and being made ready for the 2016 field season. OCNMS plans on continuing its oceanographic monitoring and will be making decision on habitat mapping priorities. The *Rainier* cruise is set for 16 days in mid-April, including mapping the Quinault Canyon.
5. OCNMS is getting ready for its peak education and outreach season.
6. Interviews for the Research Coordinator position were conducted with participation from two SAC members, Jennifer Hagen and Tom Mumford. Carol hopes to announce the new Research Coordinator at the next meeting.

Member Reports and Future Agenda Topics

- John Veentjer announced that the WDOE-funded update of Vessel Traffic Risk assessment completed by George Washington University for 2015. The next meeting Harbor Safety Committee meeting will be held on April 6 at in Seattle from 10am-12pm, and the Vessel Traffic Steering Committee meeting from 1-5pm.
- Jennifer Hennessey noted that the state's Marine Spatial Planning process is working on spatial analyses including GIS of compiled data. She announced the next WCMAC meeting on April 20 in Aberdeen at the Port of Grays Harbor. They hope to have a draft plan out by late summer.
- Jan Newton reported that the Cha'ba buoy off La Push is back in the water and can be followed at www.nanoos.org in real time, with a climatology app that can be used. The "Blob" is reported to have lost its bullet pattern; however, sub-surface readings of warmer water suggest

that it could be lurking at depth. NANOOS has been participating in NOAA's Western Regional Environmental Conditions and Impact Coordination Project monthly conditions and impacts.

- Bob Boekelheide announced the Olympic Bird Fest in mid-April, with 2.5 days in Neah Bay and activities in OCNMS. The annual Washington Coast Cleanup will take place on Saturday, April 23. Volunteers can register at www.coastsavers.org.
- John Stadler noted that Groundfish Essential Fish Habitat (EFH) team has a report going to PFMC. The briefing will take place next week with the goal of the Council reducing the number of alternatives to be reviewed under NEPA. The notice for intent for EIS went out for public comment.
- Joel Kawahara invited any comments on the Groundfish Essential Fish Habitat, since he participates in that group and attends PFMC meetings. He has been attending a series of meetings regarding the salmon availability for harvest of the Washington coast and Puget Sound. Several rivers are expected to not have natural spawning this year. The low numbers of coho salmon are linked with the warm water temperatures and lack of northern copepods. Joel is not optimistic that there will be a salmon season this year, and fears a deep negative economic impact without the activity it generates during the tourism season. A decision will be made in April.
- Tom Burlingame reiterated the problems Joel highlighted, but is hopeful for a chinook harvest off the coast. He believes that everyone will work together very hard to make something possible.
- Steve Shively noted that funding for WA State Tourism experienced a second year in a row where legislation did not leave committee, and hence is dead. It will need to be rewritten to fund the state tourism system. A proposal to keep bare minimum operations active at \$400,000 was cut by half. The Go West gathering for global tourism recently took place in Alaska to promote tourism in the western states, with markets from Asian, European, South American markets. The entire state of Washington was only represented as Seattle, due to entire funding support from Port of Seattle and lack of state funding to participate.
- Captain Brian Gilda noted an upcoming national exercise to take place the week of June 7 to practice preparedness in the event of a catastrophic earthquake scenario in the Cascadia subduction zone. The exercise is FEMA-led and the U.S. Coast Guard will practice various aspects.
- Casey Dennehy reminded everyone to participate in the WA Coast Cleanup on April 23 and that Surfrider Foundation will be hosting BBQs at Hobuck, La Push, West Port and Ocean Shores.
- Jodie Toft shared that TNC and partners are working on coastal restoration projects to the Legislature. Contact Jodie if you have ideas or are seeking funding to implement a project from Cape Flattery and down the coast. Last year they received \$11 million to fund 20 projects. There is also a scoping effort underway to determine the viability of a community business association for fishermen.
- Jennifer Brown-Scott shared that USFWS has reduced staff and budget, so it will become more difficult for her to attend meetings as regularly. They are still hoping to work with WDFW to conduct tufted puffin and sea otter surveys on the outer coast, as well as the annual aerial seabird survey.

- George Hart announced that Navy Region Northwest is sponsoring a presentation on OCNMS by George Galasso on Earth Day (April 22). It will be held at the US Naval Museum in Keyport at 1pm, and is open to the public.

The next OCNMS Advisory Council meeting will take place on **Friday, May 20th** in Neah Bay, WA. The meeting was adjourned.