

WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

AGENDA

Wednesday, March 27, 2019 9:30 am – 3:30 pm

Location: Port of Grays Harbor Commissioners Chambers, 111 S. Wooding St. Aberdeen, WA

Call-in Instructions: Dial: 641-715-0632; Access Code: 542294#

Coffee and Treats: Breakfast refreshments will be served at 9:15. Please come early to enjoy them. **The meeting will start promptly at 9:30 a.m.**

Time	Agenda Item (Action items are marked with "I")	Objective (Information, Discussion, Action?)	Presenter(s)
9:30 (15 min)	Welcome & Introductions, Agenda Review <ul style="list-style-type: none"> Welcome and Introductions Review agenda ! Adopt summary of December meeting 	Information <i>Reference Materials:</i> <ul style="list-style-type: none"> Agenda Draft Meeting Summary 	Garrett Dalan, WCMAC Chair Susan Gulick, Facilitator
9:45 (45 min)	Coastal Updates <ul style="list-style-type: none"> MRC Updates, Agency Updates, MRAC and General Coastal Updates 	Information	WCMAC Members Susan Gulick, Facilitator
10:30 (15 min)	Update on Orca Task Force Recommendations <ul style="list-style-type: none"> Overview of the current status of recommendations 	Information <i>Reference Materials:</i> <ul style="list-style-type: none"> SRKW Legislative Update 	Susan Gulick, Facilitator
10:45 (30 min)	Salmon Harvest: Questions for Future Discussion <ul style="list-style-type: none"> Develop a list of questions for WDFW to answer at the June meeting. 	Information, Discussion	WCMAC Members Susan Gulick, Facilitator
11:15 (60 min)	Ruckelshaus Center COHORT Project	Information, Discussion <i>Reference Materials:</i> <ul style="list-style-type: none"> COHORT Scope of Work 	Amanda Murphy & Phyllis Shulman, Ruckelshaus Center Susan Gulick, Facilitator
12:15 (15 min)	Morning Public Comment	Information	Public/Observers
12:30	LUNCH		
1:30 (45 min)	Update on Maritime Blue 2050 Initiative <ul style="list-style-type: none"> Overview of Initiative WCMAC Questions and Discussion 	Information, Discussion <i>Reference Materials:</i> <ul style="list-style-type: none"> Maritime Blue 2050 Initiative (link) 	Joshua Berger, Dept. of Commerce
2:15 (15 min)	Work Group Updates <ul style="list-style-type: none"> Science-Policy Workshop /Grant application status Other updates 	Information	Bobbak Talebi, Ecology
2:30 (15 min)	WCMAC Workplan <ul style="list-style-type: none"> Agenda Topics for Next Meeting <ul style="list-style-type: none"> Update by Marine Sanctuary WDFW on Salmon Harvest Agenda Topics for Future meetings 	Information, Discussion <i>Reference Materials:</i> <ul style="list-style-type: none"> WCMAC Workplan 	WCMAC Members Susan Gulick, Facilitator
2:45	Afternoon Public Comment	Information	Public/Observers
3:00 (15 min)	Other Issues <ul style="list-style-type: none"> Reminder of Dates and Times for Future Meetings WCMAC funding recommendations Other issues or announcements 	Information <ul style="list-style-type: none"> WCMAC Funding Requests 	WCMAC Members Susan Gulick, Facilitator
3:30	Adjourn		Garrett Dalan

Upcoming WCMAC Meetings

- Wednesday, June 12, 2019
- Wednesday, September 18, 2019
- Wednesday, December 11, 2019

Meetings are held in Aberdeen unless otherwise noted

WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

Draft Summary

Wednesday, December 12, 2018 9:30 am – 3:30 pm

Location: Port of Grays Harbor Commissioners Chambers, 111 S. Wooding St. Aberdeen, WA

All meeting materials and presentations can be found on the WCMAC website:

<https://www.ezview.wa.gov/?alias=1962&pageid=37058>

Council Members Present	
Brian Sheldon, Shellfish Aquaculture	Michael Rechner, DNR
Casey Dennehy, Recreation	Mike Cassinelli, Recreational Fishing
Corey Niles, WDFW	Mike Passmore, Wahkiakum MRC
Dale Beasley, Commercial Fishing	Randy Lewis, Ports
David Fluharty, Educational Institution	RD Grunbaum, Conservation
Doug Kess, Pacific MRC	Rich Osborne, Science
Garrett Dalan, Grays Harbor MRC	Rod Fleck, N. Pacific MRC
Jay Carmony, State Parks	Russell Calender, WA Sea Grant
Jeff Ward, Coastal Energy	Tiffany Turner, Economic Development (by phone)
Crystal Dingler, Citizen (by phone)	

Council Members Absent	
Alla Weinstein, Energy	Joshua Berger, Dept. of Commerce
Jessica Helsley, Sust. Salmon Partnership	Larry Thevik, Commercial Fishing
Jennifer Hennessey, Governor's Office	Sally Toteff, Ecology
	VACANT, Shipping

Liaisons Present	
None	

Others Present (as noted on the sign-in sheet)	
Angela Pietschmann, Cascadia Consulting, Note-taker	Kevin Decker, WA Sea Grant
Bobbak Talebi, Ecology	Nir Barnea, NOAA Marine Debris Program
Felicia Olmeta-Schult, Ecology	Sidney Fishman, Dept. of Ecology
Jackson Black, TNC/WSG	Susan Gulick, Sound Resolutions, Facilitator
Katrina Lassiter, WDNR	Troy Wood, WDNR

Welcome and Introductions

Garrett Dalan welcomed everyone to the meeting. All attendees introduced themselves and were invited to provide updates. Susan Gulick reviewed the agenda. The planned update on the Maritime Blue 2050 Initiative will be rescheduled for 2019.

Updates

- New council member Russell Calender briefly introduced himself as the WA Sea Grant Director. He's been on the job for three months and previously worked for NOAA for 20 years.

September Meeting Summary

- Susan asked for additions or changes to the September meeting summary. No written changes were submitted.
- The September Meeting Summary was adopted.

Coastal Updates

MRC Updates

North Pacific MRC:

- Rod Fleck provided an update on bipartisan federal [Opportunity Zones](#) program:
 - He attended a meeting in Seattle two weeks ago to discuss the Opportunity Zone process, how to utilize it, and the tax incentives provided to investors who fund businesses in underserved communities.
 - Investors can defer paying taxes on capital gains that are invested in Qualified Opportunity Funds that in turn are invested in distressed communities designated as Opportunity Zones by the governor of each state.
 - Communities must have individual poverty rates of at least 20 percent or median family income up to 80 percent of the area median in order to qualify. Up to 25 percent of the low-income census tracts in each state can be designated as Opportunity Zones. Rules will be clarified over the next few weeks.
- Rich Osborne noted that there will be no meeting this month (the last meeting was in November). The group is working on how to distribute leftover funds. By January they should know how money will be distributed.

Wahkiakum MRC:

- Mike Passmore noted they are entering the 5th season of pinniped monitoring along county waters and hoping it will be successful.

Pacific MRC:

- Doug Kess reported that they are beginning to plan the Science Conference that will be held in May. They are also discussing reviving and renovating the Chinook Hatchery. Mike Cassinelli added that most pumps at the hatchery are not in working order. Renovation funding is coming from an outside source (estate). They discussed the project with WDFW (Larry Philips) and are planning to hire a biologist from Grays Harbor College who is interested in the facility and volunteered to help with the project.

Grays Harbor MRC:

- Garret provided an update that Nicole Demmert has been hired by Grays Harbor College as a Culinary Arts Instructor with the specific objective of helping to make the college a sustainable seafood hub. It has the potential to impact and create opportunities for the entire coast and major landing ports.
- The Hoquiam River Restoration Project has been proposed for \$12M in funding for projects along the coast. It re-engages tidal wetlands on a large scale. There are some concerns about destroying a freshwater wetland to create a tidal wetland; however, it was a strong estuary habitat before railroad blocked drainage float with railroad grate.

Agency Updates

- Ecosystem Indicators (EI): Bobbak provided an update on how to narrow the field of proposed EIs. He coordinated a meeting with Susan, Corey, Katrina, Chris Hardy from NOAA, and Jenny Waddell from NOAA's Olympic Coast National Marine Sanctuary to explore the alignment of the various efforts on ecosystem indicators and discuss funding available to advance this work.
 - Next steps: work with Chris Hardy to do modeling around EI and follow up with his team to scope something that could be done within the timeframe and budget. This may be challenging due to timing and limited staff.
 - He and Jenny Waddell are discussing WCMAC input to the Olympic Coast National Marine Sanctuary Condition Report and looking for overlaps with EI work. Jenny will attend next WCMAC meeting to provide updates on Condition Report and invite WCMAC to participate in this process. Jenny will keep WCMAC updated on their progress and find ways for WCMAC to participate/provide input.

- Science and Research Agenda: The work group has not met because of the staffing gap at Ecology. The Ocean/Ecosystem Planner (Jen's old position) and an 18 month project position to help with the implementation of the MSP have been announced and ECY is receiving applications. Please feel free to send candidates their way. The position should be filled shortly, depending on applicant pool.
- Washington State Department of the Military - Emergency Management Division (EMD): There are funds left over from updating the state's enhanced Hazard Mitigation Plan last year. They want additional data and information around shoreline change on the coast. ECY's Coastal Monitoring & Analysis Program (CMAP - led by George Kaminsky) presented on the Grays Harbor erosion profile. Building off the Grays Harbor, the EMD is funding CMAP to complete a coast-wide profile over the next 18 months.

MRAC

- Garrett did not have any MRAC updates. He will continue to forward out newsletters and share through the listserv.

Other Coastal Updates

- Sea Grant: Russell Callender noted that Sea Grant is issuing an RFP in mid-January for roughly \$1M for research. It will be similar to last year's RFP, focusing on healthy coastal ecosystems, sustainable fish and aquaculture, resilient communities, etc. In addition, they are awarding three fellowships:
 - [NOAA Coastal Management Fellowship](#)
 - [Dean John A. Knauss Marine Policy Fellowship](#)
 - [National Marine Fisheries Service – Sea Grant Joint Fellowship](#)
- MRC Summit: Casey Dennehy attended the MRC Summit at the end of October and created a [blog post](#) recapping the event. Most presenters gave permission to share their slides which are available for review, including George Kaminsky's and Peter Ruggiero's.
- Off-shore Oil and Gas Exploration: Casey reminded the group that the 2nd draft proposal for off-shore oil and gas exploration is expected anytime. President Trump expanded or approved use of sonar for seismic testing on the east coast, but we are hoping WA and OR are taken off the list. Surfrider has been collecting signatures on their surfboard tour including signatures from 1,000 businesses. Surfrider will present the surfboard at Recreational Hill Day in DC in February.
- WA Seafood Day: Dale Beasley provided information on the Coalition of Coastal Fisheries' first ever WA Seafood Day on Feb. 25th for legislators in Olympia (invite only). They do not want to let the attention to the orca crisis go to waste and are working on ways to get more salmon out into the ocean and Puget Sound for orcas and fisheries.
- Southern Resident Killer Whale (SRKW) Task Force: Rich Osborne provided an update on SRKW Task Force. Gov. Inslee is announcing tomorrow his final decisions.
- Olympic Region Harmful Algal Bloom (ORHAB): Rich Osborne provided an update on recent ORHAB meeting between Coastal Tribes, NWFS, and NOAA. They are monitoring phytoplankton for harmful outbreaks.
 - 2018 has been a great year—no shellfish closures. There is a potential El Nino building and it is looking like the winter of 2014 (blob before El Nino). They are gearing up to get sampling going this season to avoid taking out crab fisheries.

- ORHAB is working with Makah tribe, UW, and NWFSC on sampling Juan de Fuca eddy and Heceta eddy as most major outbreaks come out of those areas and then get distributed up and down coast. They are using a device attached to a buoy out in open ocean that samples for domoic acid. They are also using a GPS-driven electronic robotic sailing vessel in Neah Bay that samples water and runs on wind with tiny electric motors. It is working well and could be used in winter or under extremely bad conditions and still come back with data.
- [Grays Harbor Vessel Traffic Risk Assessment \(GHVTRA\)](#): Randy Lewis noted the final [Grays Harbor Vessel Traffic Risk Assessment](#) was published on ECY website.
- Dale Beasley highlighted two recently passed federal bills that will impact WCMAC work:
 - [Endangered Salmon Predation Prevention Act](#)
 - [Frank LoBiondo Coast Guard Authorization Act of 2018](#)
- Doug Kess reminded the group that Mike Cassinelli is running for the Fish and Wildlife Commission's at-large position. He asked the group to consider writing a letter of support on behalf of yourself as an individual or on behalf of your MRC, as appropriate. Doug will forward the information on how to submit letters.

WA Marine Debris Action Plan

Nir Barnea from NOAA's Marine Debris Program (MDP) provided an overview of his group and Washington's Marine Debris Action Plan. His presentation is available on the [WCMAC Website](#).

NOAA MDP is a small program consisting of 21 people; 11 are based in DC and 10 coordinators are based in coastal regions around country. Nir is responsible for the PNW region (OR and WA). He works with partners to reduce marine debris in the region, primarily through prevention, cleanup, and research. Partners include agencies, tribes, NGOs, industry, academia. The Marine Debris Action Plan increases effectiveness of partner efforts and helps track activities over time.

Marine debris is an increasingly bigger problem around the world. It is defined as any solid item that is persistent, man-made, and finds its way into the marine environment (including rivers and great lakes). It is often plastic, especially from single-use packaging. 1 million water bottles are sold around the world every minute and plastic use is increasing rapidly. With all of the plastic being generated and used, waste management and recycling have not kept up. Marine debris can also be derelict fisherman gear (lines, nets, crab pots, buoys, vessels). Microplastics (smaller than 5MM in diameter) and microfibers are key concerns and found pretty much everywhere.

Marine wildlife can get entangled in marine debris or ingest it. It magnifies in the food web and eventually can be passed on to humans. Debris like fishing lines can entangle ship propellers and damage or sink vessels. Debris can reduce tourism and millions of dollars are spent cleaning it up.

WA state has taken a proactive approach to reduce, prevent, and research marine debris, for example:

- WDFW's ongoing efforts to remove lost crab pots and creosote wood in Puget Sound and Pacific Coast.
- Regular volunteer beach cleanups.
- [Northwest Straights Foundation](#) has removed more than 5,797 derelict fishing nets from Puget Sound since 2002—restoring more than 830 acres of marine habitat and saving over 400 marine mammals, birds, and fish daily.
- Research on microplastics and shoreline surveys.
- Derelict vessels program is one of the best in nation.

- [WA 2018 Marine Debris Action Plan](#) published in September. Action plans are ongoing; 8 action plans are currently active and are updated every half year.

Nir closed his presentation by thanking attendees for their attention and comments. He thanked partners like WA state agencies, NGOs, industries, academia, and tribes that work on marine debris in WA state, the U.S., and around world. It is a huge problem with no quick solutions that will require lots of goodwill, resourcefulness, and collaboration.

Discussion and Questions

- What is the largest contributor of microfiber?
 - Clothing made of synthetic fiber. When we wash garments like fleece, fibers wash down drain.
- If municipality sewers operate under permits from ECY, why hasn't this issue been fixed since we know the cause?
 - Traditional water treatment does not capture microfibers.
- Why hasn't the state implemented a \$0.05-0.10 deposit on plastic bottles to encourage recycling and help reduce marine debris?
 - This legislation has been proposed but was defeated.
- Are there any updates on the Pacific garbage patch cleanup efforts?
 - A boom was deployed to see if it would work on the garbage patch. It encountered technical problems and did not retain the debris it was collecting. They are not sure how they will address this issue since it is not working the way they had hoped.
 - Plastic is ubiquitous—we wouldn't be where we are now as a society without plastic. But we need to consider the use of plastic versus the irresponsible use of plastic (for example, using plastic items for long time and then recycling vs. using once and throwing away). Not every country has resources for effective waste management programs so plastic ends up in the environment and ocean and becomes marine debris.
 - A number of solutions could be applied relatively painlessly through personal actions we can all do.
 - Plastic doesn't break down completely; it accumulates at the micro level. Microplastics only recently became a focus in 2008 when experts from around the world assembled to discuss solutions. The focus on microfibers is even more recent.
 - Dale Beasley added that crab fishermen offshore are also working on this project. The group raised over \$40M for this cleanup effort with 6 or 7 booms planned. They are working out the collection problems identified on the first run. Recently they have begun selling plastic bracelets made of marine debris to raise money and increase awareness.
- Dave Fluharty added that he is part of a group called Open Channels, a NOAA MDP partner org. They have a [website](#) for marine debris info in addition to what is on NOAA website (citizen-oriented process).
- Jay Carmony added that the electrostatic charge of microplastics in the marine environment draws in petroleum contaminants in the water. In terms of food web interactions, organisms ingesting microplastics have additional toxins from the petroleum. The plastic passes through the organism back out into marine environment but the toxins continue to move up the food chain. We now have a greater understanding around the physical nature of the presence of microplastics and how they behave.
- Does the plan include actions for preventative measures/strategies on land?
 - Review the measures outlined in the action plan. Our first goal is prevention and has the largest number of actions in the plan. Some actions are inland, but everyone recognizes the important role of watersheds.

- Casey Dennehy provided information on [Surfrider's Ocean Friendly Restaurants](#) initiative which encourages restaurants to stop providing plasticware, provide plastic straws only on request, stop using Styrofoam and plastic bags, etc. The initiative has taken off in WA with 40 ocean friendly restaurants from Port Angeles to Long Beach to Bellingham. Part of the reason the initiative is popular is because it is not overly burdensome / regulatory.
 - He mentioned the WA state legislature is currently considering a plastic bag ban which is gaining national attention. It would be great news for prevention.
 - He mentioned that firework debris is especially bad on the coast (in particular, when the 4th of July holiday falls over a weekend). Compared to plastic bottles which are a more chronic problem, fireworks are more acute (1-2 days). Clean up efforts must race against the tide to prevent fireworks from drifting out into the ocean. Since most fireworks are technically illegal already, it is hard to prevent this debris. MRCs should step up and try to make local change in cooperation with tribes to find solutions.
- Doug Kess noted he sees three areas for action. All three areas require education and political engagement to make progress:
 - (1) Research is needed to improve wastewater processing technology to remove microfibers during treatment (extend to prescription drugs, asbestos from brake linings, etc).
 - (2) Improve awareness around the need for personal responsibility to use less plastic.
 - (3) Increase corporate responsibility for reducing plastic packaging.
- RD Grunbaum noted that [Friends of Grays Harbor](#) commissioned a study of the bridges the railroad crosses from Centralia to Hoquiam. The railroad tends to drop creosote ties and other debris into the river and around bridges and Friends of Grays Harbor put together a program to retrieve this debris. Does NOAA have money available to help with disposal? Is there a process for getting this cleaned up?
 - The MDP receives funding from congress and NOAA typically only funds projects through competitive grant process. Federal funding opportunities opens up in late August/September. There are debris removal grants every year, and prevention/research grants every other year.
 - Jay Caromoney mentioned the [WA Coast Savers](#) (NOAA MDP partner organization) recently signed up to clean up tires on beach front parks. They teamed up with ECY to tap funds to get tires removed through waste resources program.
 - Michael Rechner noted that DNR has been doing creosote piling and other debris removal over the last six years. They are increasing their budget request this year and asking for \$7M to do restoration and creosote removal (splitting funding 50:50 between those efforts). If interested, talk to DNR about using some of this money.
- Brian Sheldon noted they've been doing formal cleanups in Willapa with Coast Savers for a long time. In the past, the majority of debris is not aquaculture; however, recent cleanups show the majority of debris is from floating aquaculture. Users have been pressured by regulatory agencies to use off-bottom aquaculture gear.

Salmon Hatchery Production and Management

Michelle Culver from WDFW provided an overview of hatchery management in WA. (The presentation is available on the [WCMAC Website](#).) She works within the Intergovernmental Ocean Policy division in Olympia which covers fisheries policy and management. In addition to her work on ocean fisheries, over the last 18 months Michelle has taken a "crash course" in salmon and Chinook production as it relates to SRKW and prey availability. The governor's press conference will announce SRKW priorities in budget released this month. NOAA produces estimates of the amount of Chinook present in areas that SRKW inhabit throughout the year. The current estimated amount of Chinook present ranges annually, anywhere from 9x –

25x the amount SRKW need to consume to sustain their population. We do not know whether Chinook are actually present in same area as SRKW and what density those Chinook are at the time. We do not know optimal density of Chinook for SRKW needs.

About 90% of salmon consumed by SRKW are of hatchery origin. NOAA and DFWW analyzed specific hatchery facilities that produce fish likely to benefit SRKW. The total number of WA hatcheries has gone down. Some have transferred ownership and are now run by counties, public utility districts, or private NGO groups. Last 20 years have seen a significant decrease in hatchery production. Fish & Wildlife Commission sets hatchery goals, policies, and guidelines. Brood stock management standards provide reform as hatchery fish can pose risks to wild fish survival. Hatcheries must ensure production levels do not jeopardize the recovery of ESA listed stocks. Conservation hatcheries are specifically designed to recover weak stocks, primarily in Puget Sound.

Discussion and Questions

- What was the orca population in the mid '70s to mid-late '80s and is there a correlation to hatchery release growth?
 - Rich Osborne explained that the SRKW population reached its peak in the late '90s and has gone downhill since then. The SRKW population does not correlate with hatchery release. One hypothesis is the orcas like big salmon but since Chinook are not as big as they used to be, orcas are suffering. It is unknown whether orcas really prefer the Chinook or if they just prefer bigger fish. If it is the latter, the timing of hatchery releases could help (releasing fish when they are bigger and more attractive to orcas). The extra release of fish into environment will hopefully benefit the orcas but will also benefit other Chinook predators and will be a boost for the fishing community as well.
- It is unclear from the chart on salmon return rates whether we have seen any trends. When we talk about increasing salmon production by 50M, what is the relationship there? Are we assuming higher returns? Are there benefits to the ecosystem overall with increased production?
 - We are always trying to increase the smolt to adult return ratios, but it is highly variable. When we do an estimate on hatchery production, we take a recent year 3-5 year average on return rate and estimate future return rates. In addition to natural mortality through predation, changing ocean conditions contribute to smolt survival and adult return rates. But, there are many benefits of increased production to the ecosystem besides return rates.
- Has the SRKW Task Force considered saltwater terminal hatcheries to reduce competition between hatchery and wild fish during early phases of development off the coast? What are the pros/cons?
 - There are 45 people engaged in SRKW Task Force discussions with varying backgrounds and knowledge of hatcheries. Many Task Force members have tried getting up to speed through review of presentations and background documents from NOAA Fisheries, but discussions did not get into specific levels of detail. How production would be increased has not been discussed other than internally. We used to have net pens throughout Puget Sound and in Westport and have seen success off the California coast as it relates to smolt to adult survival. Net pens can hold fish longer and we can adjust timing to release larger fish.
- The chart on salmon returns in this presentation only goes through 2009; is there an updated chart?
 - We have asked for this data and collect it on annual basis. However, it is divided by geographic area and so we could not present it here in an "apples to apples" manner. We do have this information and can provide it with a brief explain for differences if you want to compare by geographic area.

- What happened with Chinook (or other species) survival during the blob?
 - The blob primarily affected our coho stocks. We did have a fisheries disaster declared for 2015-16 during the blob. Rich Osborne mentioned the last North of Falcon presentation showed a graph of the effects of the 2015 blob on salmon.
- It seems like the hatchery management plan for Alaska is very different from Washington, which is different from California, etc. WA has been very oriented towards recreating wild salmon but there aren't many in Willapa Bay – why not? Why not increase production in order to increase more hatchery fish for fisheries? It seems like WA is focused only on wild salmon and hatchery science has been sidelined.
 - Rich Osborne explained that wild fish are free and creating fish from hatcheries is expensive. We ultimately want free fish and do not want taxpayers subsidizing west coast fishing.
 - The amount of fish produced in specific hatcheries is based on Fish and Wildlife Commission Policy. It drives what fish we produce, how much, where, and what species.
- How much of the state-funded hatchery budgets are provided by federal government?
 - I do not know specifically. Hatcheries are funded by states for the most part with some federal funding associated with the Mitchell Act.
- Most hatcheries created under the Mitchell Act were created to mitigate what we lost in natural habitat. There is no way to recover the lost habitat because the dams flooded it and we are not going to remove all the dams in the Columbia River. Funding has flatlined and budgets have not increased to keep up with inflation. In WA, fisheries can only take tagged fish, but Canadian and Alaskan fisheries can take WA fish that migrate outside our waters. Does OR abide by the fish tagging limits? Or is there is no way to prevent fisheries from taking them outside of WA?
 - We mass mark all hatchery fish and tag 17M. We coded wire tag data from fish intercepted in AK fisheries.
- Is there any disaggregated data on the specific salmon predator populations (seals, sea lions, terns, cormorants)? Do you think heavy predation is likely causing the low salmon returns or are fisheries driving down return rates?
 - We are concerned about predation in general, birds as well as pinnipeds. While predation is a major factor, we don't know all of the pieces and to what level each contributes to low return rates.
- Will the governor's update include cost estimates for salmon increases?
 - Yes, for the 50M increase and to increase salmon for orcas, but not Pacific Salmon Council because we don't know exact details.
- Why was there a recommendation in the SRKW report to monitor Puget Sound contaminants?
 - The [SRKW report](#) includes five to six recommendations on contaminants in conjunction with DNR and ECY monitoring/studying contaminants that are most harmful for SRKW. The Task Force will continue for another year and issue another report with additional recommendations, which will mostly be around additional studies/research.
- On the map – which hatcheries would increase the Chinook stocks that would benefit SRKW?
 - Michelle will send Susan the report WDFW submitted with capacity analysis of hatcheries they analyzed that would contribute to SRKW recovery.
- Has the military been considered in the SRKW vessel recommendations as well?

- Military has been considered and the Navy is mentioned in the report but there are no specific recommendations that address their activities. Another key source of noise is WSF; the report includes a recommendation for WSF to reduce their noise.

Public Comment #1

- Kevin Decker provided information on an upcoming WA Coastal Resilience Workshop: Understanding and Using Sea Level Rise Projections on February 6, 2019 from 9:30AM–4:00PM at Grays Harbor College. The workshop will discuss sea level rise predictions and maps, plans, policies, and understanding and communicating risks. Kevin will provide more details via e-mail.
<https://wsq.washington.edu/event/understanding-and-using-sea-level-rise-projections/>

WA DNR Derelict Vessel Program

Troy Wood from WDNR provided an overview of the Derelict Vessel Program (DVP) which is becoming nationally and internationally renowned. His presentation is available on the [WCMAC Website](#). The DVP is part of the Aquatics Resource Division. The DVP is the “last resort” after a vessel is beyond the Coast Guard’s, Army Corps’, or EPA’s responsibilities. The DNR prioritizes every vessel that comes into the program, given limited resources and time. The highest priority is given to threats to human safety and/or environment. As the situation for a vessel changes, the priority level changes. 165 boats are currently on the list of derelict vessels. Removing vessels through the Voluntary Turn-In Program (VTIP) is significantly more cost effective than other removal costs.

Discussion and Questions

- Do any good boats get turned into the VTIP?
 - Yes, but unfortunately if they are turned in to the VTIP, we are required to destroy the vessel. We can take things off the vessel and sell them or use them on other vessels, but it must be destroyed.
- What is the rationale for the requirement to destroy the vessel instead of reselling is?
 - To avoid owners being taken advantage of (for example, if an owner turned in a boat that was salvageable the DNR could resell it instead of telling the owner). Generally, vessels turned in are not usable but if they do have value, we encourage owners to sell them. We investigate each vessel’s condition, which plays into the prioritization.
- Does the DNR recycle the materials from these vessels?
 - Yes, every chance we get. We are currently doing tests with local companies on fiberglass recycling. It doesn’t always work out; there are so many chemicals on concrete vessels and none of the recyclers will touch it because it leaches heavy metals and doesn’t bind well. Feel free to send any recycling strategies to Troy for review.
- What happens if you discover an abandoned or derelict boat that is potentially leaking or filled with oil?
 - If the vessel is just *holding* oil, we can’t do anything about it for 30 days. If it is *actively leaking*, we can remove the vessel or stop the leak under a temporary emergency possession to make sure the situation is safe. Sometimes removing all of the fuel from the vessel is sufficient to abate the emergency situation. We have good contacts at DFW and ECY and work with their contractors to pump the fuel.

- Why would the government abandon a vessel?
 - The government can sell vessels to the highest bidder via GSA. The government is not the one abandoning the vessel, but the vessel is government-made. Because these vessels are built sturdier and larger, they are more difficult to dispose of.
- What lessons have been learned from recent incidents with abandoned/derelict boats sinking?
 - People who buy large government vessels should be prepared for the responsibility that comes with that purchase (storage, maintenance, costs, etc.). The government should sell vessels responsibly. For example, currently the cheapest removal option for the Hero is \$800,000.
- What is the responsibility of the boat owner?
 - The vessel owner is always responsible, it is a misdemeanor to let a vessel become derelict. However, we've only had one or two prosecutions (owner of Hero is one of them). It is expensive to pursue misdemeanor charges, so they save those for the big issues and focus on prevention efforts. Typically, the bigger deterrent going into collections and putting liens on property.
 - Until a boat sinks or poses an immediate danger to humans/the environment, we legally cannot take possessions of property. As a result, the derelict removal program is always reactionary as we have to wait for owners to walk away from it or break a law. The VTIP is preventative.
- Does the DOL assist with tracking down the owners of derelict/abandoned vessels?
 - No, part of the problem is that the DOL deletes records after six years, so it is hard to find owners of the vessel.

Coastal Resilience Work Group Update

Bobbak provided updates on the Science-Policy Workshop on Coastal Erosion and grant applications.

Science-Policy Workshop on Coastal Erosion

- The Work Group recently had an in-person meeting to discuss coastal resilience needs and opportunities, and to talk about upcoming grant opportunities through the Coastal Zone Management Program.
- The Work Group is looking for ways to further and carry out the recommendations from the Ruckelshaus assessment.
- The Work Group realized they do not have capacity to take on all hazards so we are moving forward with natural hazards, prioritizing the ones we think are highest risk (erosion is at the top of the list).
- A science policy workshop to address coastal erosion issues is in the works for the spring.

Grant Application

- The Coastal Zone Management Program is offering its annual competitive grant up to \$250K (Project of Special Merit). ECY using this grant as an opportunity to continue to support the Ruckelshaus report recommendations and address hazards on the coast.

- During the Work Group's in-person meeting, we revisited last year's grant proposal. Feedback on last year's proposal:
- The Work Group talked about narrowing the focus of grant application this year and how to best deploy resources to connect the role of MRCs. This year's grant application (due on 12/19) won't look dramatically different from last year but will have a sharper focus on delivering more coordinated assistance and working with coastal communities to get projects defined and lined up for funding.

Resilience Initiative

While agencies and communities work on getting projects on the ground to demonstrate the needs, the timing is right, and the representatives are in place, to think big about larger problems on the coast and get long-term commitment from state to invest in resources and staff. The WCMAC would like to put additional time into fleshing out the first recommendation listed in the Ruckelshaus report focused on multi-agency assistance program located on the coast – which would include economic and social components. ECY will reach out to the Ruckelshaus Center to explore the possibility given the timing and available funds.

Discussion and Questions

- What are the short-term vs. long-term resiliency time scales?
 - This still needs to be defined by WCMAC. We are trying to figure out ways to avoid narrowing our focus to hazards resilience in order to include the broader concept of resilience, especially the economic and social components.
- Since we have money left in the budget, is there any low-hanging fruit we could take advantage of now that would inform the grant process on resiliency?
 - We could use some of the remaining \$65K in funds to contract Ruckelshaus to work on the first recommendation from assessment.
- Is the grant application available?
 - we will distribute to WCMAC
- Are there specifics on what to propose for MRCs? Will it just be funding, or will they do some coordination?
 - We are trying to leave it flexible. WCMAC should be discussing how to leverage MRCs in the best way.

Public Comment #2

- No public comments were registered.

WCMAC Workplan

Current workplan for 2018

Susan noted that we don't know what the budget appropriations will be for next year, but we should assume status quo. The four main topics for next year will be:

- Coastal Resilience
- Ecosystem Indicators
- Science and Research Agenda
- Monitor Implementation of MSP

Tentative Agenda Topics for Next Meeting

- Update from Marine Sanctuary.
- SRKW Task Force and funding.
- Rescheduled Blue 2050 Initiative presentation.
- Potash terminal plant

Members should send specific questions about agenda items and presentation topics in advance to Bobbak and Susan so they can brief presenters and help them tailor presentations to audience needs.

Other issues

Dale asked that WCMAC fund the development of an historical narrative around the decline of salmon and fishing industry since the 1970's in Washington coastal communities. The narrative could be presented legislators and focus on the impacts to economies and livelihoods. The Steering Committee will discuss this.

Upcoming WCMAC Meetings

- Wednesday, March 27, 2019
- Wednesday, June 12, 2019
- Wednesday, September 18, 2019
- Wednesday, December 11, 2019

Meetings are held in Aberdeen unless otherwise noted

- **April 3, 2019** is deadline to pass bills out of committee in the opposite house and read them into the record on the floor, except House fiscal committees and Senate Ways & Means and Transportation committees.
- **Legislative calendar:** <http://leg.wa.gov/legislature/pages/calendar.aspx>
- Missed a hearing and want to watch it after the fact? Visit the **TVW archives** for that day and pull it up: <https://www.tvw.org/archives/>

Governor-Requested Orca Legislation (grey indicates bill is dead)

Bill	Description
<p>SHB 1578 Lekanoff</p> <p>Status:</p> <ul style="list-style-type: none"> • 02/19: Substitute bill Passed out of House Committee on Environment & Energy • 02/28: 1st substitute bill passed out of House Committee on Appropriations • 03/07: Passed out of the House on (yeas, 70; nays, 28) • 03/19: 10:00 AM Public Hearing, Senate Environment, Energy and Technology 	<p><i>Reducing threats to Southern Resident orcas by improving the safety of oil transportation.</i></p> <ul style="list-style-type: none"> • Specifies tug escort requirements for oil tankers of a certain size. • Requires tug escorts for certain sized oil tankers and articulated tug barges transited through Rosario Strait and connected waterways. • Requires the Board of Pilotage Commissioners to adopt rules for tug escorts in Puget Sound. • Authorizes the Department of Ecology (Ecology) to adopt rules for an emergency response towing vessel to be situated in the San Juan Islands area. <p>Effect of changes made in substitute bill:</p> <ul style="list-style-type: none"> • Exempts vessels providing bunkering or refueling services from tug escort requirements adopted in statute or by rule. • Clarifies that new tug escort requirements may only apply to oil tankers of between 5,000 and 40,000 deadweight tons. • Clarifies that new tug escort requirements only apply to towed waterborne vessels or barges, with the exception of requirements applicable to oil tankers or articulated tug-barges. • Requires Ecology to provide a synopsis of changing vessel traffic trends to the Legislature by September 1, 2020, and to consider that synopsis during tug escort rulemaking. • Directs Ecology and the Board of Pilotage Commissioners to consult with potentially-affected federally recognized Indian tribes, rather than consulting with tribes with usual and accustomed fishing rights in areas subject to rulemaking. • Expands the scope of tribal governments and other entities that Ecology is directed to partner with to discuss shared funding of an emergency response towing vessel.
<p>2SHB 1579 Fitzgibbon</p> <p>Status:</p> <ul style="list-style-type: none"> • 02/06: Substitute bill Passed out of House Committee on Rural Development, Agriculture, & Natural Resources • 02/25: 2nd substitute bill passed out of House Committee on Appropriations • 03/07: Passed out of the House (yeas, 59; nays, 39) • 03/19: 1:30 PM Public Hearing, Senate 	<p><i>Implementing recommendations of the Southern Resident Orca Task Force related to increasing Chinook salmon and forage fish abundance.</i></p> <ul style="list-style-type: none"> • Removes bass, channel catfish, and walleye from statutory classification as game fish. • Requires a fishing license to fish for smelt. • Directs the Department of Fish and Wildlife (DFW) to first seek voluntary compliance from a hydraulic project proponent if a violation of the hydraulic code has occurred or is about to occur. • Authorizes the DFW to offer technical assistance to correct violations and to issue notices of correction, notices of violation, stop work orders, or notices to comply to hydraulic project proponents in cases of violations of the hydraulic code. • Removes the requirement that the DFW issue permits with or without conditions for single-family residential bulkheads and rock walls. • Authorizes the DFW to apply for an administrative inspection warrant to inspect project sites to verify compliance, or if there is probable cause to believe a violation is occurring or has occurred. • Increases civil penalty for hydraulic code violations from \$100 per day per violation to \$10,000 per violation. • Authorizes the DFW to disapprove applications for up to one year, or until all penalties and notices are paid and complied with, for persons who have failed to comply with either a final stop work order or notice to comply or failed to pay a civil penalty.

Bill	Description
<p>Agriculture, Water and Natural Resources.</p>	<p>Effect of changes made in substitute bill:</p> <ul style="list-style-type: none"> • Removes the provision declassifying bass, walleye, and channel catfish as "game fish", and directs the DFW to adopt rules to ease bag limits for those species. • Requires a license to fish for saltwater smelt instead of all smelt. • Creates a hydraulic project pre-application that a person may file with the DFW to determine whether a project requires a complete application for a hydraulic project permit. The DFW must provide tribes and local governments a seven-calendar day review and comment period for pre-applications. If the DFW determines that a complete application is required, the applicant would then be required to submit a "complete application" as defined in statute and the DFW would process the permitting decision. • Provides that the new hydraulic code enforcement provisions do not apply to hydraulic projects that have received a forest practices hydraulic project permit from the Department of Natural Resources. • Removes the provision declaring a violation of the hydraulic code to be a public nuisance.
<p>2SHB 1580 Blake</p> <p>Status:</p> <ul style="list-style-type: none"> • 02/20: Substitute bill Passed out of House Committee on Rural Development, Agriculture, & Natural Resources • 02/28: 2nd substitute bill passed out of House Committee on Appropriations • 03/07: Passed out of the House (yeas, 78; nays, 20) 	<p>Concerning the protection of Southern Resident orcas from disturbance by vessels.</p> <ul style="list-style-type: none"> • Increases distance within which a vessel or other object may not approach Southern Resident orcas. • Provides additional temporary approach limits for commercial whale watching vessels and requires the DFW to report on the effectiveness of the approach limits. • Establishes a limited-entry commercial whale watching license, sets fees for the license, and requires the DFW to report on the license program. <p>Effect of changes made in substitute bill:</p> <ul style="list-style-type: none"> • Changes the distance within which it is unlawful to approach or to fail to disengage the transmission of a vessel from 200 yards to 300 yards of a Southern Resident orca whale and specifies that it is unlawful to position a vessel within 400 yards behind a Southern Resident orca. • Deletes temporary 650-yard approach limit for commercial Southern Resident orca whale watching vessels. • Provides that the commercial whale watching license is not a limited-entry license, maintains the \$75 application fee, and changes the license fees as follows: <ul style="list-style-type: none"> • The annual commercial whale watching license fee is \$200, plus annual fees for designating motorized or sailing vessels, and for kayaks. • The annual fees per motorized and sailing vessel are based on the number of passengers per vessel, on a similar schedule as in the underlying bill. • The annual fees for designating kayaks are based on the number of kayaks. • Creates an alternate operator license, with an annual fee of \$200, for a designated alternate operator to operate a motorized or sailing commercial whale watching vessel. • Specifies that commercial whale watching without a permit, or violating the DFW rules regarding commercial whale watching, is a misdemeanor, and doing so within one year of the date of a prior conviction is a gross misdemeanor. • Requires the DFW to establish rules to implement the commercial whale watching license program that are designed to reduce the daily and cumulative impacts to Southern Resident orcas. • Authorizes, instead of requires, the DFW to consider the use of an automatic identification system for monitoring and compliance. • Requires the DFW to involve the public, industry, and other interested parties in any rulemaking process. • Adds whale watching rules and approach distance regulations to the items the DFW must analyze and report on to the Governor and the Legislature. • Requires the DFW to convene an independent science panel, before January 1, 2021, to review the most current and best available science regarding impacts to Southern Resident orcas by small vessels and commercial whale watching vessels. The DFW must use the review in the rulemaking process and to adaptively manage the commercial whale watching program. • Adds sustainable whale watching to the topics required the statewide tourism marketing plan.

Bill	Description
<p>2SSB 5577 Rolfes</p> <p>Status:</p> <ul style="list-style-type: none"> Substitute bill passed out of Senate Committee on Agriculture, Water, Natural Resources & Parks 02/28: 2nd substitute bill passed out of Senate Committee on Ways & Means 03/07: Passed out of the Senate (yeas, 46; nays, 3) 03/20: 8:00 AM, Public Hearing: House Committee on Rural Development, Agriculture and Natural Resources 	<p><i>Concerning the protection of Southern Resident orcas from disturbance by vessels.</i></p> <p>Effect of changes made in substitute bill:</p> <ul style="list-style-type: none"> Changes the distance within which it is unlawful to approach or to fail to disengage the transmission of a vessel to 300 yards of a Southern Resident orca and specifies that it is unlawful to position a vessel within 400 yards behind a Southern Resident orca. Deletes the provision establishing a temporary 650-yard approach limit for commercial Southern Resident orca whale watching vessels. Provides that the commercial whale watching license is not a limited-entry license and changes the license fees. Creates an alternate operator license for a designated alternate operator to operate a commercial whale watching vessel. Specifies that commercial whale watching without a permit, or violating department rules regarding commercial whale watching, is a misdemeanor. Requires the DFW to establish rules to implement the commercial whale watching license program that are designed to reduce the daily and cumulative impacts to Southern Resident orcas and requires the DFW to involve the public, industry, and other interested parties in any rulemaking process. Requires the DFW to convene an independent science panel to review the most current and best available science regarding impacts to Southern Resident orcas by small vessels and commercial whale watching vessels. Adds sustainable whale watching to the topics required that the statewide tourism marketing plan must cover.
<p>SSB 5578 Van de Wege</p> <p>Status:</p> <ul style="list-style-type: none"> 02/07: Substitute bill Passed out of Senate Committee on Environment, Energy & Technology; referred to Ways and Means. 	<p><i>Reducing threats to Southern Resident orcas by improving the safety of oil transportation.</i></p>
<p>SB 5580 Rolfes</p> <p>Status:</p> <ul style="list-style-type: none"> 02/05: hearing occurred; did not progress further 	<p><i>Implementing recommendations of the Southern Resident Orca Task Force related to increasing Chinook salmon and forage fish abundance.</i></p>

Bills that mention orca but may or may not be connected to one of the TF recommendations (grey indicates bill is dead)

Bill	Description
HB 1341 Hudgins	<p><i>Prohibits an unmanned aerial system from approaching, in any manner, within two hundred yards as measured in any direction, including vertically, of a southern resident orca whale.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/05: Passed out of House Committee on Innovation, Technology & Economic Development • 03/01: Passed out of the House (yeas, 67; nays, 26)
SSB 5135 Rolfes	<p><i>Establishes the pollution prevention for healthy people and Puget Sound act. Prevents toxic pollution that affects public health or the environment.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/14: Substitute bill Passed out of Senate Committee on Environment, Energy & Technology • 02/26: 1st substitute bill passed out of Senate Committee on Ways & Means • 03/07: Passed out of the Senate (yeas, 25; nays, 24)
SB 5918 Lovelett	<p><i>Providing whale watching guidelines in the boating safety education program.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/21: Passed out of Senate Committee on Agriculture, Water, Natural Resources & Parks • 1st substitute bill passed out of Senate Committee on Ways & Means on 2/28; Passed out of the Senate on 3/7: yeas, 48; nays, 0)
SSB 5617 Salomon	<p><i>Requires the DFW to: (1) Develop a program for the purchase and permanent retirement of salmon gill net licenses and (2) Administer the fishing license buyout program in three phases.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/21: Substitute bill Passed out of Senate Committee on Agriculture, Water, Natural Resources & Parks, referred to Ways and Means
SHB 1632 Gregerson	<p><i>Prohibits a food service business from selling or providing food in or with plastic food service products however, the business may sell or provide food in compostable food service products that meet standard specifications.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/19: Substitute bill Passed out of House Committee on Environment & Energy, referred to Rules Committee
SHB 1824 Young	<p><i>Provides that the legislative intent is to preserve and protect both the orcas and the salmon of the Pacific Northwest by encouraging cooperating with Indian tribes, the scientific community, and other entities to address the threat of pinnipeds to salmon. Requires DFW to file for a permit under the federal marine mammal protection act for the maximum lethal take of sea lions to enhance salmon recovery.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/19: Substitute bill Passed out of House Committee on Environment & Energy, referred to Appropriations; did not progress further.
SHB 1194 Doglio	<p><i>Establishes the pollution prevention for healthy people and Puget Sound act. Prevents toxic pollution that affects public health or the environment.</i></p> <p>Status:</p> <ul style="list-style-type: none"> • 02/12: Substitute bill Passed out of House Committee on Environment & Energy, referred to Appropriations
SB 5824 Ericksen	<p><i>SB 5824—Ericksen: Implements a pilot program to examine the opportunities and challenges association with organizing DFW's fish hatchery activities to emulate the fish hatchery policies of the state of Alaska with regard to salmon. Provides that the objective of the pilot program is to evaluate the development of a system of fish hatcheries that will be financially self-supporting over the long term.</i></p> <p>Status:</p> <p>No hearing occurred in committee</p>

THE WILLIAM D. RUCKELSHAUS CENTER

UNIVERSITY OF WASHINGTON

STATEMENT OF WORK

Developing Options for the Coastal Hazards Organizational Resilience Team (COHORT)

Purpose: The William D. Ruckelshaus Center (Center) has developed this proposal to explore and develop options for the establishment of a Coastal Hazards Organizational Resilience Team (COHORT) in collaboration with the Washington Coastal Marine Advisory Council (WCMAC).

Background and Overview:

To more fully understand and appropriately approach a path forward to natural hazard resilience on Washington's Coast, the Department of Ecology's Coastal Program partnered with the office of U.S. Representative Derek Kilmer and Washington Sea Grant to commission a "Washington State Coast Resilience Assessment" completed by the William D. Ruckelshaus Center (Center) and published in May 2017.¹ The assessment included 104 interviews and examined interests, challenges, and provided recommendations and key leveraging actions for improving community resilience.

The Coastal Program has been working closely with the Governor's Office and other key agencies to find creative solutions to advance the wide range of actions identified for improving coastal and community resilience. In March 2018, Governor Jay Inslee added capacity to support these efforts by requesting the assistance of the Washington Coastal Marine Advisory Council (WCMAC) to prioritize needs and actions to carry out the recommendations in the Ruckelshaus Center Assessment.

After a year of learning and investigation, the WCMAC decided that a priority should be placed on options for pursuing a "coast-wide resilience initiative to enhance and integrate efforts." According to the Ruckelshaus Center's Assessment Report:

A coast-wide approach would elevate existing resilience efforts, mobilize new efforts, and weave together local initiatives while providing a systems approach to issues, risk analysis, project evaluation, and shared strategy development. The initiative could be developed in a way that builds on the efforts and leadership of coastal tribes, Conservation Districts, government agencies, existing organizations, communities, groups, and individuals while also providing a vehicle to bridge government, non-governmental, and academic analysis and research.

To best address this need, the Ruckelshaus Center's report highlighted that there needs to be a core group of entities who would partner together as integrators, provide backbone services, and work as a team in addressing resilience issues coast-wide. The Center recommended the formation of a "Coastal Hazards Organizational Resilience Team" (COHORT). The COHORT would establish a formal partnership that would assist in aligning key resources and expertise, spearheading cross-fertilization of ideas, enhancing collaboration, and coordinating strategic investment in projects and programs. WCMAC and coastal communities would like to create a request for state resources and directive for establishing the COHORT, but acknowledge that work is needed to design and operationalize this concept.

¹ Washington State Coast Resilience Assessment Final Report, May 1, 2017:
https://s3.wp.wsu.edu/uploads/sites/2180/2013/06/Washington-Coast-Resilience-Assessment-Report_Final_5.1.17.pdf

Proposed Scope of Work

The Center offers this proposal for a scope of work as an initial recommendation based on conversations to date with staff at Department of Ecology. Included is an estimated scope of work and budget for the Center to conduct information gathering, including exploring potential models for organizational structure, engagement with WCMAC and potential COHORT partners, and organizational design and development of options and recommendations for the practical establishment of a COHORT. Overarching considerations to explore during the research process:

- Goals, purpose, and mission of the COHORT
- The definition of resilience and how it relates to the goals, mission, and purpose
- Opportunities for leveraging existing assets and resources
- Organizational structure, governance, and alignment with existing structures
- Cost, options, and tradeoffs

The tasks would be conducted from February 1, 2019 to June 30, 2019 by Amanda Murphy, Center faculty and Sr. Project Lead, Phyllis Shulman, Ruckelshaus Center Senior Facilitator, Tye Ferrell, Resilience Collaborative North West, and Shelby Thomas, Ruckelshaus Center Project Intern. WCMAC staff and facilitator will help support the coordination of meetings and will provide guidance throughout the project.

Task 1. Information Gathering

The Center would research potential organizational models that could be applied to the COHORT. Through information gathering the Center will develop a list of key issues and organizational elements that would need to be addressed in the development of the COHORT. In addition, the Center would solicit initial input from the WCMAC, the WCMAC Resilience Sub-Committee, and potential agency and university partners.

Task 1. Deliverables:

- List of key organizational elements that need to be addressed
- One meeting with the WCMAC to gather initial input that will inform information gathering
- One meeting with the WCMAC Resilience Subcommittee to gather initial input that will inform information gathering
- One meeting with agencies/Governor's staff/COHORT entities to gather initial input that will inform information gathering

Task 2. Organizational Design and Options

The Center would work with WCMAC and potential agency and university partners to address implementation issues and organizational design options for the establishment of the COHORT model. This could include identifying trade-offs, strengths, and weaknesses of options.

Task 2. Deliverables:

- Up to two meetings with WCMAC Resilience Subcommittee to discuss information gathered about key issues and organizational elements and to gather input on potential organizational design options for establishment of COHORT model.
- One meeting with agencies and COHORT entities to discuss information gathered about key issues and organizational elements and to gather input on potential organizational design options for establishment of COHORT model.

Task 3. Documentation and Facilitation of Exploration of Option

The Center would document options, implementation considerations, and could identify recommendations for implementation. The Center would facilitate discussion on next steps for implementation.

Task 3. Deliverables:

- One meeting with WCMAC to discuss options, implementation considerations, and recommendations for implementation.
- One meeting with WCMAC Resilience Subcommittee to discuss options, implementation considerations, and recommendations for implementation.
- One meeting with agencies and COHORT entities to discuss options, implementation considerations, and recommendations for implementation.
- Written Report that describes COHORT options, implementation considerations, and recommendations for implementation and actionable next steps.

This scope of work assumes the following:

- No more than 2 meetings with the WCMAC
- No more than 4 meetings with WCMAC Resilience Subcommittee
- No more than three meetings with COHORT entities
- One meeting with agencies and Governor’s staff
- Meetings would be held via phone and/or videoconferencing, except for meetings with the full WCMAC and with governor’s staff.

Budget

Salary and Benefits	\$25,297
Supplies/Materials	\$100
Travel	\$300
Overhead	\$6,681
Total	\$32,378

NOTE: These are preliminary estimates only and have not been reviewed by WSU or UW contracting or finance offices. As such, they are subject to modification as part of the formal contracting process. These estimates include a good faith assessment of the appropriate Facilities and Administration (F & A or Indirect Cost) recovery rates (26% for most activities herein), which may also be changed after formal review. These estimates are provided to facilitate discussion and negotiation, but do not constitute a formal offer or the basis of a formal contract – which may only be executed by the WSU Office of Grant and Research Development.

WCMAC Workplan

3/19/19

	Topic	Purpose	Source*	WCMAC Focus	Timeframe	Tasks	Information Needs	Working Group (Y/N)	Notes/Status Updates
A.	Coastal Resilience	To update WCMAC on efforts to address coastal resilience and identify areas where WCMAC may want to provide informal or formal advice on the issue, or provide leadership in convening dialog or gathering information.	C	Information Sharing; Possible informal advice	Ongoing	1. Potential survey on regulatory flexibility and impediments to addressing coastal resilience issues. 2. A science-policy workshop on coastal erosion 3. Grant application to assist local communities with coastal resilience projects and potential funding	1. Informational Briefing 2. Reports from current efforts	Yes	* Panel Discussion occurred at Sept. WCMAC meeting. * Coastal Resilience Work Group is formed and is holding meetings * Grant funding for a series of workshops was resubmitted; economic workshop may happen through other entities
B.	Ecosystem Indicators	To provide feedback to the state on refining the list of ecosystem indicators.	C	Informal Advice	6/18-6/19	1. Compile existing lists of indicators, summary of methods, and proposed process for refining indicators (<i>WCMAC staff</i>) 2. WCMAC briefing and discussion (<i>WCMAC Meeting</i>)	1. List of current potential indicators 2. Summary of methods used to identify current list 3. Informational briefing on developing scientifically robust indicators	No, but included in work of Science & Research Agenda Work Group	*Need to consult with NOAA (NWFC)
C.	Science and Research Agenda	To provide feedback to the state on the development of a science and research agenda, including data gaps and WCMAC's priorities.	C	Informal Advice	1/18-6/19	1. Compile Data Gaps (<i>WCMAC Staff</i>) 2. WCMAC Discussion on Initial List of Gaps and Priorities (<i>WCMAC Meeting</i>) 3. Coordinate with ecosystem indicators work	1. List of data gaps (initial list from MSP) 2. Summary of existing, current science needs documents for WA Coast (e.g. OCNMS, PFMC)	Yes	On hold pending hiring by Ecology
D.	Monitor Implementation of MSP	To keep WCMAC informed of MSP implementation efforts	C	Information Sharing	Ongoing	1. Summarize status of MSP implementation tasks (<i>WCMAC staff</i>)	1. Informational Briefing on Status of MSP Implementation	No	*Include briefing on how the plan gets used, particularly regarding new applications *Review plans that are inconsistent with MSP
E.	Annual Work Plan	To develop an annual workplan to guide planning for WCMAC meetings and activities.	B	Operations/Admin	12/18	1. Compile topics and outcomes (<i>Steering Committee</i>) 2. Develop draft annual workplan (<i>Steering Committee</i>)	1. Input from WCMAC members and Gov's office on topics and priorities	No	* Initial draft work plan discussed at September meeting with final work plan addressed at Dec. meeting.
F.	WCMAC Meeting Agendas and Operations	To fulfill Steering Committee responsibilities as listed in the by-laws	B	Operations/Admin	Ongoing	1. Set WCMAC Agendas for each meeting 2. Conduct officer elections every 2 years		No	

Source: C= Governor's Charge; B=Bylaws

Other Topics of Interest/Future Consideration

Notes/Comments

1 Coastal Erosion	Coastal Resiliency Work Group is planning a Science-policy workshop on Coastal Erosion
2 Sea-level rise	An education presentation by Sea Grant?
3 Trends in changing ocean conditions	
4 Shipping overview	
5 Oil terminals	
6 Potash Terminal in Grays Harbor	
7 Commercial Net Pen Aquaculture	
8 Offshore Aquaculture	Will provide ongoing updates to WCMAC as appropriate
9 Shellfish Aquaculture Management issues (e.g. invasive species, burrowing shrimp, etc.)	Will provide ongoing updates to WCMAC as appropriate
10 Invasive Species and Pest Species Management	
11 Changing Fishing Fleets and Alternative Fishing Methods	
12 Coastal Energy	Other coastal groups are considering hosting a workshop
13 Economic Development: How to coastal communities adapt to changing economy?	
14 Building Local Capacity	
15 Watershed Protection	
16 Ecosystem Services Valuation	
17 Coastal Oil and Gas Leasing	

Topics Addressed in Previous Meetings

Notes/Comments

Vessel Traffic/Navigational Safety/Transport of hazardous substances	Briefing on Grays Harbor Vessel Traffic Risk Assessment occurred at 3/28/18 meeting.
Ocean Acidification	Presentation by MRAC members at 6/13/18 meeting
Tsunami/Disaster Preparedness	Presentation at 6/13/18 Meeting
Juvenile salmon survey results and ocean conditions	Webinar in 9/18
Briefing from WDFW on recreation and commercial fishing allocation	Presentation at 12/12/18 meeting

WCMAC Funding Requests

To request WCMAC support for funding a specific project or action, please follow the following steps:

1. Is the request consistent with WCMAC's budget request and the legislature's budget proviso?
 - a. If yes, proceed to step 2
 - b. If no, funding cannot be considered
 - c. If you are unsure, the Steering Committee can assist you.
2. Prepare a scope of work and budget for WCMAC consideration
 - a. If needed, a sub-group can be formed, and staff support can be provided to assist you.
3. Request that Steering Committee add this to a WCMAC agenda