WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

AGENDA

Wednesday, February 10, 2016 9:30 am – 3:30 pm
Location: Port of Grays Harbor Commissioners Chambers, 111 S. Wooding St. Aberdeen, WA

9:15 a.m. 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 "!")	Objective (Information, Discussion, Action?)	Presenter(s)
9:30	Welcome & Introductions, Agenda Review • Welcome by Chair Garrett Dalan • Introductions, including coastal updates • Review agenda ! Adopt summary of December meeting • Public Comment	Information *Reference Materials:* • *Agenda* • *Draft Meeting Summary*	Garrett Dalan Susan Gulick
10:15	Update on Use Analysis • Draft sector and roll-up maps • Discuss next steps	Information, Discussion *Reference Materials:* • *Discussion Guide*	Jennifer Hennessey, Ecology
11:15	Oil Transport Issues and Marine Spatial Planning • Overview • WCMAC Questions and Discussion	Information, Discussion *Reference Materials:* • *Discussion Guide*	Sally Toteff, Department of Ecology
12:00	Introduce Recommendation Sorting Exercise • Review instructions for WCMAC members to place dots on draft recommendation options that they either strongly support or strongly oppose.	Discussion *Reference Materials:* • *Instructions* • *Table of draft options*	
12:15	Lunch Break • WCMAC will complete the dot exercise during the lunch break		
1:15	Draft WCMAC Recommendations • Review the results of the sorting exercise • Review draft economic recommendation for format and level of detail • Agree to next steps	Discussion	Facilitated Discussion Susan Gulick, Facilitator

2:00	Sea Floor Mapping • Briefing on opportunity to expand sea floor mapping ! Decision on whether to recommend funding	Information, Decision *Reference Materials:* • Discussion Guide	Penny Dalton, WA Sea Grant
2:30	Economic Assessment • Update • Next Steps	Information	Mike Taylor, Cascade Economics
3:00	Updates and Elections ! Re-Election of Chair and Vice-Chair • Work Plan • MRAC (Ocean Acidification Panel)	Information, Decision *Reference Materials:* • *Updated Work Plan* • *Discussion Guide*	Staff/WCMAC Members
3:15	Upcoming Meetings • Agenda Topics for Next Meeting • Reminder of Dates and Times for Future Meetings	Information	Susan Gulick
3:20	Public Comment	Information	Public/Observers
3:30	Adjourn		Garrett Dalan

Upcoming Meetings

(Meetings will be held in Aberdeen unless otherwise noted)

- April 20, 2016
- June 15, 2016
- September 28, 2016 (proposed date)

WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

Draft Summary

Wednesday, Dec 9, 2015 9:30 am – 3:30pm
Location: Port of Grays Harbor Commissioners Chambers, 111 S. Wooding St., Aberdeen, WA

Council Members Present	
Julie Horowitz, Governor's Office	Michele Culver, Dept. of Fish and Wildlife
Casey Dennehy, Recreation	Brian Sheldon, Shellfish Aquaculture
David Fluharty, Educational Institution	Penny Dalton, WA Sea Grant
Doug Kess, Pacific MRC (phone)	Randy Kline, WA State Parks (phone)
Garrett Dalan, Grays Harbor MRC	Randy Lewis, Ports
Jeff Ward, Coastal Energy	RD Grunbaum, Conservation
Mark Cedergreen, Recreational Fishing	Rich Osborne, Science
Mark Plackett, Citizen	Rod Fleck, N. Pacific MRC
Michal Rechner, DNR	Sally Toteff, Dept. of Ecology
Dale Beasley, Commercial Fishing	Larry Thevik, Commercial Fishing

Council Members Absent	
Alla Weinstein, Energy Industry	Miles Batchelder, WA Coast Sustainable Salmon Partnership
Carol Ervest, Wahkiakum MRC	Tiffany Turner, Economic Development
Charles Costanzo, Shipping	Joshua Berger, Department of Commerce

Liaisons Present	
Katie Krueger, Quileute Tribe Liaison	

Others Present (as noted on the sign-in sheet)	
Marie Novak, Cascadia Consulting, Note-taker	Jessi Doerpinghaus, WDFW
Corey Niles, WDFW	Katie Wrubel, Makah Tribe
Gus Gates, Surfrider Foundation	Katrina Lassiter, DNR
Jennifer Hennessey, Ecology (WCMAC Staff)	Kevin Decker, Washington Sea Grant
Kelsey Gianou, Ecology	Libby Whiting, DNR
Greg Mueller, WA Trollers Association	Susan Gulick, Sound Resolutions, Facilitator
Jim Long, Commercial Fishing	Al Carter, Ocean Gold Seafoods
Brian Lynn, Ecology	Rick Lovely
David Beugli, Willapa Oyster Growers	Ross Barkhurst, WA Waterfowl Association

1. Welcome & Introductions, Agenda Review

Garrett Dalan welcomed everyone to the meeting. All attendees introduced themselves and were invited to provide updates, and members of the public were invited to provide comments.

- There are four new members of the WCMAC: Randy Lewis from the Port of Grays Harbor is filling the Port seat; Joshua Berger of the Dept. of Commerce is taking over Stephen Sewell's seat; Tiffany

Turner is filling the economic development seat, and Larry Thevik is replacing Ray Toste to fill one of the commercial fishing seats.

- Miles Batchelder is stepping down as WA Coast Sustainable Salmon Partnership director; there will be a new executive director. This will create a new vacancy on WCMAC.
- Sally Toteff had several updates:
    - She thanked everyone for providing comments on the EIS drafts for proposals at the Port of Grays Harbor – Ecology received over 100,000 comments.
    - A boat sunk at West Point Marina this past weekend; most of the oil on board was absorbed and there were no reports of damaged wildlife.
    - Significant flooding is occurring throughout the state; emergency management agencies are preparing but more severe coastal erosion is possible, especially for at-risk communities.

Public Comment

- Ross Barkhurst requested that the WCMAC consider the state of Willapa Bay in their deliberations. He stated that coastal fall chinook are overharvested and coho runs have crashed, there is little eelgrass in Willapa Bay Refuge, no brant geese, observed lower numbers of other waterfowl (e.g. Northern pintail), and that there are severe flaws in the draft EISs for oil terminals in Grays Harbor. He also stated that there has been no insecticide spraying and activity will hopefully rebound there.
- Brian Sheldon responded that Ross had misrepresented figures and impacts of insecticide use. Mark Cedergreen also commented that most coastal chinook are caught in Alaskan or Canadian waters and we have no control over damage to harvests.
- Michele Culver elaborated on the chinook and coho problems mentioned by Ross, clarifying that the National Marine Fisheries Service Report to Congress on the status of fish stocks did say coastal fall chinook were overharvested in the year 2010, but they have not been designated as overfished. This fall, there have also been low coho returns and die offs, which they are studying to determine if they are related to high levels of domoic acid.
- Al Carter from Ocean Gold Seafoods commented that competing uses such as ocean energy will be problematic as these projects could potentially displace fisheries. More information on these alternative energy projects, their developers, the costs of the projects, and the projected costs of energy need to be provided and discussed openly in this group.
- Michal Rechner reminded everyone about proper conduct during these meetings. WCMAC members should not respond to public comments. Brian Sheldon replied that he thought it was important to correct misinformation.

Adoption of September Meeting Summary

- There were no amendments or edits to the September meeting notes.
    - ! The summary was adopted as written.

2. Reflections on MSP – Penny Dalton

Penny Dalton provided a summary of the conference that she and several other WCMAC members attended in Rhode Island in the fall on marine spatial planning. Other attendees provided their takeaways and reflections.

- Washington's situation is different as we have no concrete projects yet, and there are many stakeholders. Tribal authorities, local control and authorities under the Shoreline Management Act, harbor areas, public port authorities, and other constitutional protections also add layers of complexity.
- Attending the conference reinforced the concern for protecting communities and sustainable uses and the need to lay a strong, durable foundation for future activities and developments.

- Creation of a Fishing Advisory Board, a smaller, more targeted advisory group comprised of representatives of all the various fisheries, was very important to processes elsewhere. These types of groups allow for specific involvement from fishing interests in projects and proposals. This might be something the WCMAC might want to recommend.
- Bridget Trosin from WA Sea Grant is working with partners at RI Sea Grant on a project comparing marine spatial planning case studies from around the country, due out by the end of the month. Washington was one of the case studies chosen and several participants in WCMAC were interviewed for the case study. She will be contacting WCMAC members to ensure is the report is accurately capturing and representing quotes and contributions from interviews.

Questions and Comments

- Sally Toteff requested more discussion about how the group influences and engages with federal agencies to ensure accountability. The example of a Fisherman's Advisory Board was provided, which consults on proposed projects and advises federal agencies.
- Brian Sheldon commented that public access to working waterfronts is being pursued and has come to include commercial development not just for water-dependent uses, which will undermine working waterfronts. He requested the group consider working waterfronts when developing the MSP and growth management policies.
- Rod Fleck mentioned that multiple planning requirements under different statutes have not been reconciled or reviewed in relationship to sustaining existing industries. Perhaps one recommendation should be that land use planning efforts be reviewed for how they support existing industries/uses.

3. Update on Use Analysis – Jennifer Hennessey

Jennifer Hennessey gave a presentation on the Use Analysis, available at HERE. A discussion guide on the use analysis and draft authority map for marine spatial planning was included in the packet.

- The Use Analysis is a process to: 1) summarize geographic data on current uses in two ways: by intensity and by footprint; 2) assess potential spatial interactions between existing and new potential uses (e.g. renewable energy) and 3) inform the development of spatial recommendations.
- Jennifer showed draft map outputs for shipping, recreation, aquaculture, military, and non-tribal fishing; as well as a drafts of all high intensity uses (across all existing uses) and the number of sectors present in a particular area.
- Fisheries maps were updated by WDFW with input from the fishing sectors and a workshop held in November. Crab fishery data now includes units for the high, medium and low levels of effort, which represent the number of trips. Tribal fishing efforts are currently excluded from all fishing maps.
- The maps do not yet include ecologically important areas analysis.
- The next step will be overlaying renewable energy maps, which could be done as a simple GIS overlay and comparison. However, there are several types of software models that can assist with evaluate specific scenarios, such as Marxan and InVEST. The Technical Committee can explore these options more fully.

Questions and Comments

- Someone asked about aquaculture areas shown on the map in the Strait of Juan de Fuca. Michal Rechner clarified that there are currently no aquaculture authorizations in the Strait, and Rich Osborne commented that it was probably seaweed, but would be good to confirm.

- Larry Thevik commented that tribal exclusion area on the map might be misinterpreted as an area where no fishing occurs. Also, log data goes back 3 years which might not accurately capture historical average use.
- Someone pointed out the need to explain in the narrative that intensity of use could be linked to regulatory issues which could change over time. Jennifer responded that they will have contextual information in chapters that go with maps describing uses.
- Katie Krueger commented that the legislature's decision to exclude tribal fisheries' data will misrepresent coastal activity. Michele Culver commented that DFW is working to coordinate with tribes to include whatever data they are willing to share.
- Brian Sheldon commented that estuaries don't have activity represented which could be misleading. Michele responded that they don't have log book data for within bays and estuaries, which is explained in the narratives. Additionally, DFW has treated the estuaries as having the highest level of ecological importance. When they overlay the fisheries, fishery activity will show up in these areas, although without intensity data.
- Dave Fluharty commented that map titles should be explicit so that viewers understand that it does not necessarily capture all data (e.g., Non-Tribal Commercial Fisheries), and Larry added that timeframes could also be included.
- Dale Beasley commented that clipping areas for the study area doesn't capture the full area of use (e.g. Albacore area), which might not represent footprint and potential use conflicts if there is a project that wants to locate just outside of the use area.
- RD Grunbaum asked for clarification on the timeframe represented. Michele responded that they had to rely on different data sources. Maps show where there is fishing at some point in the year, but do not distinguish between how long the particular fishing season is open.
- Sally Toteff noted that color saturation is a better data visualization tool than using different colors.
- Several commented that "zero high intensity fisheries" is confusing and wording should be changed.
- Dale commented that community dependency on a particular activity is more important than use intensity, and is not conveyed by the maps. He recommended that the maps demonstrate coastal communities' reliance on a given activity to be meaningful for the MSP. There was disagreement on how actually to determine community reliance and both Michele and Jennifer mentioned that data did not exist to produce a spatial map, but that contextual data on reliance/dependence could be provided in the plan. He also recommended reviewing Oregon's experience with Marxan.
- Some members cautioned that military use could trump anything proposed. Katie Krueger questioned how the Navy is integrated into this process. Jennifer responded that we have been updating and seeking information from and getting input from relevant federal agencies on the process.
- Casey recommended that the military layer be removed for visualization in the sector use map.
- Dave offered to send a student thesis that reviews methodologies and their application for displaying information, which he can make available to Jennifer and the group. He also suggested adding specific naval activity exercise areas to better represent military spatial use of areas, perhaps as a separate map.
- Michele requested that the group discuss at some point what tools might be useful in helping develop and assess recommendations. Rich suggested multiple models be used.

4. Viewshed Analysis

Rich Osborne gave a presentation on the Viewshed Analysis, available HERE, and asked for suggestions for improving the maps. The analysis provides approximations of how far out a renewable energy project would have to be from the coast to be invisible to someone on land at various heights. Developers would

be required to do a more in-depth analysis based on their proposed project to provide more exact information on aesthetic impacts.

Questions and Comments

- Jeff Ward mentioned that 90 m for windmill height is probably an underestimate.
- Mark Plackett suggested that the MSP study area (700 fathoms) be represented in the maps.
- Katie Krueger and Jeff Ward commented that even at the shortest distance required for invisibility (18 miles), the energy penalty across transmission lines would be very high, making the project unrealistic.
- Dale Beasley suggested reviewing Oregon's process for viewshed valuation.

5. Burrowing Shrimp in Willapa Bay – Kim Patten

Kim Patten from WSU Extension gave a presentation on burrowing shrimp and efforts to control them, available HERE.

- Burrowing shrimp destroy shellfish habitat, and treatment has previously included the insecticide Carbaryl, which was phased out. Research on alternative mechanical and cultural control methods and diverse management approaches has been done without much success.
- Another chemical control agent, Imidacloprid, has been effective at controlling shrimp with minor or temporary environmental impacts relative to Carbaryl under this type of application. There has been major public concern over its use since it is a neonicotinoid, and the growers association subsequently requested to withdraw their pesticide spraying permit in May.
- Finding another effective alternative will take several more years and millions in funding, and very few people are currently researching this issue.
- Without an acceptable alternative treatment method, predicted shellfish production losses could be 10% per year, or up to 25% per year if recruitment levels return to those seen in the 1990's.

Questions and Comments:

- Rich Osborne asked why burrowing shrimp reached critical mass in the 1950's and 60's; Kim responded that there are theories about dams and a decline in predators, but that no one knows. He also asked what impact sea level rise will have on the areas being studied; Kim responded that he did not know but that the immediacy of the issue will probably be lost in the gradual rise of sea level.
- Larry Thevik asked how the 2.8 economic multiplier used in the presentation was obtained to determine the value of the shellfish industry. Kim responded that he consulted WSU economists. Larry also asked what the market impacts were after the use of pesticides was publicized. Brian Sheldon answered that they did not see much change at all.
- Casey Dennehy asked if there was any connection with ocean acidification to population dynamics of shrimp. Kim answered that they are researching this issue.
- Sally Toteff asked about other areas like pocket estuaries and shorelines that have experienced similar spikes in shrimp populations. Kim responded that Brett Dumbauld of OSU could answer more questions.
- Mark Plackett asked if it was possible to harvest the shrimp for consumption. Kim responded that they are not very palatable and very difficult to collect so this is not a viable control approach.
- Brian Sheldon emphasized the need to manage shrimp and japonica eelgrass to protect shellfish habitat and return them to production of oyster species.

6. WCMAC Anniversary

For the 2-year anniversary of WCMAC 2.0, Garrett Dalan read a poem he wrote to celebrate the accomplishments of the group. He received a lot of laughter and applause. A video can be found at HERE; if Garrett can be convinced to share an electronic copy we will post that as well.

7. Draft WCMAC Recommendations

Susan Gulick described the Technical Committee's process to develop problem statements about key issues and options to address them. Susan reviewed how the group will determine recommendations by consensus. A discussion guide as well as a draft of MSP recommendations was provided in the packet.

- Problem statements are in bold, options are ideas from the Technical Committee. The group did not vet options, or research relevant permitting agencies and authorities for particular options. Additional research can be done on the draft recommendations WCMAC members are interested in pursuing.
- WCMAC can also make recommendations directly to the Governor and Legislature that do not fit under existing limitations of the MSP.
- When the spatial analysis is complete, there will be more spatial recommendations.
- All are welcome to join the Technical Committee calls; the next call is Wednesday, December 16 from 2:30-4:30 pm PST. Susan sent out call information to WCMAC members earlier.

Questions and Comments

- Katie Krueger expressed concern about groups receiving adequate notice from permit-seeking parties. She mentioned a centralized west coast data portal may in the future provide a notice board for new permit requests.
- RD Grunbaum asked how and where expanding existing uses are included. Larry Thevik agreed with the question about what constituted a new use in this plan.
- Rod Fleck suggested adding a section for the permitting process for all new uses, including consolidating who at the state receives notice of a project and how they provide notice to any interested parties. As part of the permitting process, require an economic analysis for the project and having that apply to all new uses.
- Mark Plackett suggested focusing on the problem statements and the recommendations focus on the "what is desired/needed" as opposed to the "how" (i.e. not getting too deep into the "hows").

The group then focused its discussion on the three economic problem statements and options:

- Sally Toteff suggested that for economic impacts WCMAC could craft a recommendation there be an economic analysis for new projects. We would need to identify what specifically should be in the economic analysis, and lay out standard expectations for the process, including adequate notice, comment period (how long we believe is adequate review time), and expectation for response to comments within a specific timeframe.
- Brian Sheldon asked if there was a standard format for an economic impact analysis. Katie suggested Sally send some examples from Ecology.
- Katie asked how we regard pilots. Brian requested they be included as part of the project definition.
- Rod expressed concern about the wording of "long-term economic feasibility," as this might limit all new activity or expansion on the coast, especially if pilot projects are limited. He suggested evaluating it for "significant adverse impacts." He noted that investors take business risks all the time and it is not our job to make that determination.

- Penny Dalton suggested some wording be shifted to sound less about controlling negative impacts and more about the opportunity to develop capacity in and positive benefits for coastal communities.
- Mark Plackett expressed concern that communities where these projects will occur do not want to be stuck with unfunded obligations as a result of the project. They need to be informed about the positive impacts as well as the obligations beforehand.
- The group is interested in economic impact analysis and community engagement as part of the permit application process, although details are still underdetermined. A possible recommendation could be for agencies to exercise their authority to require applicants to do certain things.
- Larry Thevik expressed concern over the long-term economic feasibility portion, especially for projects that will be trying to test a new technology. Elements about decommissioning and physical mitigation are present but not long-term economic mitigation.
- Jeff Ward suggested making use of existing MSP work products, such as the coastal economic analysis. Developers should describe how their projects would affect the baseline established in the analysis and what the non-job-related costs of an industry would be on a community. Other members expressed support for having developers identify economic impacts to the existing condition in the area and using the information we've already produced (e.g. as a change to baseline or existing conditions).
- Katie suggested providing recommendations on how to improve the permitting process in order to affect regulatory changes, perhaps as an additional appendix.
- Based on the conversation, Garrett suggested having a few key and generalized recommendations and really focus on the problem statements and a high-level resolution statement rather than several, really detailed recommendations or checklist.
- Dave Fluharty said that we need to connect these issues to the rest of the state as well as address the costs and benefits to coastal communities.
- Penny Dalton suggested that we indicate clearly that this focuses on the coast and not Puget Sound.
- Katie offered to help synthesize bullets after January 15th.
- Staff and Susan will work on the consolidating problem statements and bullets based on the conversation and then distribute again to the group after January 1st. Please provide Susan with any additional feedback on problem statements.

8. Updates

Economic Assessment

- Cascade Economics is still working on the FAQ document.

Wok Plan

- Jennifer Hennessey went through the updated Work Plan, included in the packet. The goal is for the group to come to consensus on problem statements and draft recommendations over the next couple meetings.

MRAC (Ocean Acidification Panel)

- The group met in November. Updates are captured in emails sent out periodically through a list serve.

Nominations

- Terms are up for WCMAC chair and vice chair in January; currently the chair is Garrett Dalan and vice chair is Doug Kess. The bylaws encourage electing new leadership after two terms.
- Brian Sheldon nominated Garrett and Doug again as chair and vice chair, respectively.
- The nomination period is open until December. 31st. Send nominations to Susan or Jennifer.
- Julie Horowitz, Garrett, Michal, Rod, and Doug are currently on the Steering Committee. Let them know if you want to join this committee.

- Brian Sheldon and Rich Osborne are currently co-leads on the Technical Committee. Brian encouraged others to nominate themselves or others to lead the Technical Committee.
- Katie Krueger expressed appreciation for how welcome she has felt, especially as a non-voting member.

9. Agenda Topics for Next Meeting

Susan reviewed the current February agenda items:

- Oil transport and oil spills – how it fits into MSP, why this is not considered a new use, and what is this group's ability to make recommendations. Scott Ferguson might be a potential presenter on this topic. See Ecology website for draft EISs with information describing various proposals.
- Draft recommendations continued.

10. Public Comment

There was no afternoon public comment.

Meeting adjourned at 3:21 pm.

Summary of Decisions:

- The September Meeting Summary was approved as written.

Upcoming Meetings

- February 10, 2016
- April 20, 2016
- June 15, 2016

Meetings will be held in Aberdeen unless otherwise noted

Discussion Guide: Use Analysis Process Update
February 10, 2016

Purpose:
The Use Analysis is a process:

- To summarize geographic data on current uses: 1) patterns/intensity and 2) total number of uses occurring in a given area.
- To assess the potential spatial interaction between existing and new potential uses.
- To inform the development of spatial recommendations (e.g. protection of existing uses and sensitive resources) and consultation and communication with project proponents.

Background:
The Marine Spatial Planning law requires a plan to include maps of: "appropriate locations with high potential for renewable energy production with minimal potential for conflicts with other existing uses or sensitive environments" RCW 43.372.040(6)(c)

At the October 22, 2014 meeting WCMAC agreed to participate in the Use Analysis Process. WCMAC has an important role in advising on the criteria for the process and recommended actions for the outputs of the Use Analysis.

Creating a Marine Spatial Plan requires compiling and evaluating spatial, or mapped, data including existing uses and potential new uses. The state has outlined its approach to this process called a "Use Analysis". The Use Analysis involves the following main activities:

- Assessing and compiling data on existing uses and ecological information in two ways:
    - Intensity of uses – how frequently an area is used
    - Number of uses – how many uses occur in an area, regardless of how often
- Using spatial analysis tools to compare existing use data to renewable energy data
- Developing spatial recommendations

Completed:

- Sector input on spatial data for the use analysis.
- Updated data and maps for the analysis, including refining intensity and footprint of data (e.g. definitions for high, medium and low intensity use).
- Fisheries maps workshop (Nov. 9, 2015)
- Most GIS work to produce sector-based maps and aggregate (all-sectors) maps for:
    - Intensity of uses
    - Number of uses
- Overview on process for tribes (Dec. 4, 2015)

Where we are now:

- Presenting most of the completed GIS maps.
- Examining options for renewable energy data comparison:
    - GIS overlays (simple)
    - Other tools: Marxan and Invest (more complex)

Next steps:

- Finalize sector and combined intensity and footprint maps.
- Compare existing use data to renewable energy data.
- Discuss and develop spatial recommendations.

Discussion Guide:
Addressing Oil Transport in the Marine Spatial Plan

Issue:
Some members have questions about increases in oil transport and why this is not one of the "new or expanded uses" being addressed by the Marine Spatial Plan.

Background:
Marine transportation of oil is a current, regulated use in Washington State. This includes transportation of petroleum products (crude oil and refined products) as well as bio-fuels (bio-diesel and vegetable oil). Many WCMAC members have expressed concerns over proposed oil terminals such as those in Grays Harbor, the changing picture of oil transportation and risks posed to the marine environment.

Several factors limit how the marine spatial plan can address oil transport. Information provided below summarizes some of the key issues.

Marine Spatial Planning Law

RCW 43.372.060 Authority limited.
No authority is created under this chapter to affect in any way any project, use, or activity in the state's marine waters existing prior to or during the development and review of the marine management plan. No authority is created under this chapter to supersede the current authority of any state agency or local government.

What that means:
State and local agencies are not provided any additional authority through the marine spatial planning law. A Marine Spatial Plan cannot be used to impose new requirements on projects or uses that are already permitted or undergoing permitting during the development of a plan.

Oil terminals are currently undergoing environmental review/permitting.
The proposed oil terminals in Grays Harbor are currently undergoing a separate environmental review and permitting process, including development of an Environmental Impact Statement to identify potential adverse impacts and identify alternatives that could avoid, minimize, and mitigate some of the adverse impacts from these terminals and their associated activities.

RCW 43.372.040(6)(b)
Using and relying on existing plans and processes and additional management measures to guide decisions among uses proposed for specific geographic areas of the state's marine and estuarine waters consistent with applicable laws and programs that control or address developments in the state's marine waters.

RCW 43.372.040(6)(e)
An implementation strategy describing how the plan's management measures and other provisions will be considered and implemented through existing state and local authorities.

What that means:
The Marine Spatial Plan must be consistent with state laws and regulations and use existing state and local authorities to implement the plan.

Marine Spatial Plan: SEPA Scoping Comments

During SEPA scoping for the plan, Ecology received and responded to a range of public comments on the subject of oil transport and whether to cover this in the Marine Spatial Plan. Those comments and responses are summarized in the Marine Spatial Plan for Washington's Pacific Coast: Summary of SEPA Scoping and Response to Comments (January 2014).

Jurisdiction

The Commerce Clause in the United States Constitution (Article 1, Section 8, Clause 3) provides power to Congress to regulate commerce with foreign nations and among states (i.e. interstate commerce). States have a limited role in regulating interstate commerce, including the types of products transported. The US Coast Guard primarily implements regulations related to waterways management.

Ocean Resources Management Act (ORMA)

RCW 142.43.010 (5)

It is not currently the intent of the legislature to include recreational uses or currently existing commercial uses involving fishing or other renewable marine or ocean resources within the uses and activities which must meet the planning and review criteria set forth in RCW 143.030. It is not the intent of the legislature to permanently exclude these uses from the requirements of RCW 43.143.030. If information becomes available which indicates that such uses should reasonably be covered by the requirements of RCW 43.143.030, the permitting government or agency may require compliance with those requirements and appeals of that decision shall be handled through the established appeals procedure for that permit or approval.

WAC 173-26-360 (4) Relationship to existing management programs

They [these guidelines] are not intended to modify current resource allocation procedures or regulations administered by other agencies, such as the Washington department of fisheries management of commercial, recreational and tribal fisheries. They are not intended to regulate recreational uses or currently existing commercial uses involving fishing or other renewable marine or ocean resources.

What that means: ORMA's criteria was not intended to apply to existing uses such as shipping, recreation or fishing. Part of intent of the MSP is improving the application of existing state laws and policies such as ORMA and its regulations to permitting and review of new ocean uses. The focus was not on regulating existing uses.

Litigation:

The Washington Court of Appeals recently ruled that marine transportation of crude oil does not constitute a transportation use as defined by ORMA, where such transportation is not associated with an ocean use (*Quinault Indian Nation v Imperium*,190 Wn. App. 696, 360 P.3d 949 (2015)). To be considered a transportation use under ORMA, the Court indicated that the transportation must be associated with a primary ocean use activity originating or concluding in Washington's coastal waters; for example, delivery to and from an offshore oil platform. Accordingly, a transportation use is only subject to ORMA review when it is incidental to an ocean use. This ruling has been appealed to the Washington State Supreme Court, which has not indicated whether they will take up the issue.

How Oil Transport is currently proposed to be included in the Marine Spatial Plan:

A variety of information on oil spills and oil transport is currently being compiled and summarized for inclusion in the marine spatial plan, including:

- Characterizing current shipping and future trends on Washington's Coast, such as information about vessel routes, types, cargo, and volumes. (Plan section 2.7)
- Information from current draft EIS's on proposed oil terminals with detailed information on potential impacts to Columbia River, Grays Harbor and Puget Sound and high-level assessment of impacts offshore. Information from other studies such as vessel traffic risk assessment studies. (Plan section 2.7)
- Information about environmental impacts and risks of oil spills. (Plan section 2.1)
- Information on risk of collisions and spills associated with siting new uses. (Plan section 2.10)

Recommendations for the MSP could address ways for potential new uses to avoid, minimize and mitigate the risk of collision and spills, including recommendations on siting potential new uses. (Plan section 4.3)

Future opportunities:
Information compiled in the Marine Spatial Plan about sensitive resources and existing uses on Washington's coast will have benefits for other groups involved in oil spill and vessel traffic risk planning and management such as the Regional Response Team and the BC-States Oil Spill Task Force.

While the overall volume imported and exported has not changed much, changes in energy sources have resulted in changes to oil transportation into and out of Washington. More oil is being brought in from Canada and North Dakota and less from Alaska's North Slope. To address concerns, the legislature requested the Marine and Rail Oil Transport Study (2015). This study identified a number of spill prevention and preparedness measures to address concerns about risks from the changing picture of oil transport in Washington. These recommendations are being addressed in a variety of other venues and by other groups (e.g. Washington Pilotage Commission, Harbor Safety Committees, U.S. Coast Guard and Ecology).

WCMAC may want to explore gaining additional information on current spill preparedness and prevention activities and next steps at a future meeting.

Instructions

Dot Exercise to Winnow Down the List of Options for MSP Recommendations

Purpose

The Technical Committee has prepared a menu of options for WCMAC recommendations. The purpose of this exercise is to identify which of these options have strong support and which have strong opposition. This will help plan the best use of WCMAC's time in developing a final list of WCMAC recommendations.

This is NOT a prioritization process. The Marine Spatial Plan will have a comprehensive list of topics and a comprehensive list of recommendations is desired. This is a process to weed out options where there is strong opposition (and therefore little hope of reaching consensus), and identifying options where there is strong support.

If options are weeded out that does not mean WCMAC will not have a recommendation on that topic. There will likely be a need to develop new options in order to address key issues. The primary purpose of this exercise is to help identify where additional work is needed.

Background

- There are five problems statements to address the key issues identified by the Technical Committee. The problem statements correspond to the following issues:
    I. Issues Related to All Potential New Uses
        A. Economic
        B. Infrastructure and Technology
        C. Ecological
    II. Additional Issues Related to Specific New Uses
        A. Offshore Aquaculture
    III. Additional Issues Related to Protecting and Preserving Existing Uses
- Under each problem statement, there are a list of options developed by the Technical Committee.
- The purpose of this exercise is to review the options prepared by the Technical Committee and identify which you **STRONGLY SUPPORT** and which you **STRONGLY OPPOSE**.

Instructions

- Please review each option and ask yourself:
    - Does this address a key concern of the group I represent?
    - Is this a feasible way to address my concern (is it implementable and enforceable?)
    - Is this likely to achieve consensus of WCMAC members?
- Under each problem statement is the full list of options developed by the Technical Committee. You will decide whether to place a **GREEN** dot, a **RED** dot, or **NO** dot on each recommendation.

A GREEN dot means that you strongly support a recommendation, and believe it is a very important recommendation to include in the MSP.

A RED dot means you oppose the recommendation and likely could not agree to including it as an MSP recommendation.

NO dot means that that you don't oppose the recommendation but that it is not absolutely essential to your support of the MSP.

- Focus on CONCEPTS, not wording. We will have time to improve the wording as we move forward; in placing dots, consider whether you support or oppose the basic concepts. If you have wording suggestions, you may place a comment on the draft recommendation using the provided post-it notes. There will be additional opportunities for suggested edits in the future.
- You may only place ONE dot (either red or green) on a draft recommendation. You should not put any dot on a recommendation unless you strongly support or oppose it.
- You will be given 7 red and 7 green dots to start. If you need additional dots, you may get them from Marie (our note-taker). There is no limit to the number of dots you receive; however, you should ONLY put dots on the recommendations that you either strongly support or strongly oppose. Some people may only use a few dots; others may use more than 7.
- At the WCMAC meeting, there will be post-it notes for you to provide written comments to explain why you are putting a red dot on an option. Your comments should address whether there is a way to change the recommendation so that you could support it (or at least not oppose it).
- There will also be a page in each section for you to write **new ideas** that are not on the Technical Committee's list. These will be woven into the process as we move forward. This is a very important part of this process: we are hoping this exercise will help you identify **WHAT IS MISSING?** We will discuss the new ideas at a future meeting.

Note: Members of the public will offered 3 red and 3 green stars (as opposed to dots) so that they can communicate which recommendations they strongly support and strongly oppose.

Caveats

- The economic recommendation is a refined option prepared by the Technical Committee, based on the discussion at the last WCMAC meeting. This is the only section that has changed.
- The section addressing how to protect and preserve existing uses, particularly fishing and aquaculture, is NOT complete. Fishing interests have identified the option of a prohibition or moratorium on new uses. Other WCMAC representatives have expressed concern about whether a moratorium would be enforceable and agreed to suggest alternative ideas to protect and preserve fishing. These options have not yet been completed. WCMAC will need to spend more time on developing options and recommendations on this topic.

Next Steps

- If an option receives a lot of green dots and no red dots, this means we can assume there is general consensus to include these recommendations.
- If an option receives a lot of red dots, this means we remove it from the list of options. If there are problem statements with no remaining recommendations (i.e. if all the options receive a lot of red dots) we will start over to identify options to address those problems. This will be a focus of significant WCMAC time.
- If there are a lot of green dots with a small number of red dots we will try to determine if there is a way to make the recommendation acceptable to everyone.
- If options receive no dots, this means the option is not controversial; while it may not have strong support it does not have strong opposition. These options will remain on the list for further consideration by WCMAC.
- The other sections of the recommendations will be reformatted, similar to the draft economic recommendation, based on the results of the dot exercise.

I. Issues Related to All Potential New Uses

A. ECONOMIC ISSUES

New uses (including significant expansion of existing uses) may have acute and cumulative impacts on the local economy, both positive and negative. There is concern that some new uses may have short-term economic gains followed by long-term economic loss due to displacement of current uses by short-term projects (such as pilot projects or abandoned or failed projects). Additionally, a new use may result national or global economic gain, but a significant economic loss at the local level. Local stakeholders and affected parties would like a clear understanding of the potential positive and negative impacts of new uses prior to the use being permitted.

		Recommendation Option	Red Dots	Green Dots
A. Economic	1	The goal of this recommendation is to provide clear information on the economic costs and benefits prior to projects being permitted, and to not permit projects when local costs significantly exceed local benefits. A. Prior to permitting significant new uses or expansions of existing uses which may cause significant impacts to either existing uses or to the local economy, an economic assessment should be completed. The assessment should include: 1. Process • Early stakeholder notice, including a detailed description of the project proposal. • A designated time period for review and comment that provides time for stakeholder input at key stages throughout the project. • A clear timeframe for response to comments. 2. Methodology • The assessment should be prepared by neutral party independent of project proponents. 3. Content • An assessment of short-term and long-term costs and benefits. • An assessment of the economic costs and benefits to the local community, including social costs and benefits. • As appropriate, an assessment of the costs and benefits to the larger economy (state, national, global). • An assessment of various scenarios, including scenarios where the new use fails and is abandoned or decommissioned. New uses or expansions of existing uses should not be permitted if the local economic costs significantly exceed the local benefits. The determination of costs and benefits should not be completed without meaningful input from local stakeholders and affected parties.		

B. INFRASTRUCTURE & TECHNOLOGY ISSUES

New ocean infrastructure raises concerns, including:

• Adding risks to navigational safety due to increased or changing traffic patterns, mooring cables or other structural impediments, debris, navigational aids, lighting, and changes to wave behaviors or currents.

• Reductions to the quality of views and coastal aesthetics.

• Derelict gear becoming entangled with permanent structures such as moorings, foundations, etc., resulting in ghost fishing, interference with existing fishing operations, or other impacts.

• Any new use that disturbs the seafloor, including dredge disposal and mining, could harm or bury cultural or historic resources on the ocean floor, including shipwrecks.

• Dredge disposal can create mounding which can cause wave amplification. This presents safety problems for fishing and general navigation.

• Coastal erosion and sea-level rise could both affect the ongoing feasibility of new and existing uses. Disposal of dredge material could help mitigate coastal erosion impacts.

Harsh coastal conditions on the Washington Coast, including storms and tsunamis, may harm or destroy infrastructure that is not adequately designed or installed to withstand extreme weather or other natural events. If a structure becomes obsolete, is destroyed, or is abandoned, there are concerns about the ongoing impacts of leaving unmaintained structures in place, the impacts of the removal process, associated debris, and footprint scars.

Off-shore uses are sometimes supported by on-shore infrastructure. It is important to understand and assess the positive and negative impacts of this infrastructure over time in order to fully understand the potential effects on local coastal communities.

		Recommendation Options	Red Dots	Green Dots
B. Infrastructure & Technology	1	Permitting agencies should require a vessel traffic risk assessment or a risk-based modelling analysis to evaluate navigational safety as part of the permitting process.		
	2	Permitting agencies should require applicants for dredge disposal prepare a risk assessment for wave amplification, and should enforce existing federal and state safety guidelines.		
	3	Permitting agencies should prohibit Mound Induced Wave Amplification over 10% from baseline conditions at approved dredge disposal sites that can pass peer review of qualified experts outside the USACE by utilizing a number of prominent world class accepted wave models, and if necessary, field verification to resolve differences in the wave model results.		
	4	Ecology should develop a mounding grid guideline that clearly states what the trigger point of the 10% mound induced wave amplification is for each depth that passes peer review of national experts in mound induced wave amplification.		
	5	Permitting agencies should require applicants whose projects will impact the ocean floor to prepare a dual-beam sonar archeological assessment.		
	6	Dredge disposal sites should be sited in areas where they contribute in a measurable way to mitigate coastal erosion problems.		
	7	[WHICH AGENCY?] should regularly monitor erosion and seawater rise on the Washington coast.		

		Recommendation Options	Red Dots	Green Dots
B. Infrastructure & Technology	8	Permitting agencies should assess the effects of projected coastal erosion, future sea-level rise, and other climate change impacts to determine the long-term suitability of a proposed new use.		
	9	Permitting agencies should require applicants to develop conceptual site drawings of all visual impacts as part of environmental review.		
	10	Permitting agencies and applicants should make every effort to keep the infrastructure out of view from shore when possible.		
	11	Permitting agencies should require applicants to prepare a survivability assessment of all structures.		
	12	Permitting agencies should require applicants to be held liable for damages and provide bonding and proof of insurance for damages caused from inadequate infrastructure.		
	13	Permitting agencies should prohibit high risk infrastructure in Tsunami inundation or subduction zones.		
	14	Permitting agencies should require applicants to provide decommissioning plans for the removal of all infrastructure when it reaches the end of its life span. Decommissioning plans must include realistic financing to ensure there are adequate funds to carry out the decommissioning at the appropriate time. Decommissioning plans should be approved prior to permitting.		
	15	Permitting agencies should require a monitoring and assessment program for derelict gear as part of the permit.		
	16	Identifiable fishing gear should be returned to the owner or replaced.		
	17	Permitting agencies should require applicants to be held liable for loss of income and loss of gear due to impacts from new offshore infrastructure. Permitting agencies should require applicants to be held liable for damages and provide bonding and proof of insurance for damages. Compensation should be provided in a timely manner.		
	18	Permitting agencies should require an assessment of the impacts and added burden to the existing infrastructure and ensure the applicant mitigates these impacts.		

C. ECOLOGICAL ISSUES

New uses raise ecological concerns, including:

- **Degradation of sensitive and important habitat to valuable species, including ESA listed species and commercially valuable species.**
- **Alteration or impairment of existing migration routes.**
- **Degradation of water quality (chemicals, petroleum products, nutrients, oxygen, temperature, acidification, etc.).**
- **Changes in physical processes, including current flow, sediment processes, coastal erosion and accretion, electromagnetic field, acoustics and wave amplification.**
- **Unintended and unanticipated impacts, including impacts to the food chain, physical processes, and access to existing resources.**
- **Inadvertent introduction of invasive species, organisms, etc. that could affect native populations and/or existing aquaculture.**

		Recommendation Options	Red Dots	Green Dots
C. Ecological Issues	1	Permitting agencies should require applicants to demonstrate that the new use will not significantly impact the habitat of valuable or listed species throughout their life cycle.		

		Recommendation Options	Red Dots	Green Dots
C. Ecological Issues	2	Permitting agencies should require applicants to establish where known or potential wildlife migration corridors for valuable or listed species exist prior to opening an area to leasing.		
	3	Permitting agencies should require applicants to prepare plans for pollution prevention and response.		
	4	Permitting agencies should require applicants to be held liable for damages and provide bonding and proof of insurance for damages from spills or chemical releases related to the new use, including servicing or otherwise supporting the new use.		
	5	Permitting agencies should prohibit vessels greater than 130 feet from anchoring, even temporarily, in Washington coastal zone except if necessary to prevent grounding as a result of mechanical failure of major vessel systems like steering, engine, broke propeller shafting, etc.		
	6	Permitting agencies should require applicants to prepare an evaluation of best available technologies that compares the proposed technology with other technology options.		
	7	Permitting agencies should require applicants, prior to permitting, to prepare an assessment of the potential impacts from changes to physical processes, including current flow, sediment processes, underwater acoustics, and wave amplification.		
	8	Permitting agencies should require applicants to monitor flows and to have a plan for minimizing and mitigating impacts, including compensatory mitigation.		
	9	Permitting agencies should require applicants to be held liable for damages and provide bonding and proof of insurance for damages caused by changes in physical processes that result in loss of species or habitat, including compensatory mitigation.		
	10	Permitting agencies should require applicants to survey sediments in areas where sediments may be at risk to provide a baseline of sediment composition, and to develop a sediment monitoring program.		
	11	Permitting agencies should require applicants to identify possible unintended consequences, and develop plans to prevent those consequences. The plans should identify how applicants will develop mitigation measures for unanticipated impacts. In addition, monitoring should be required so that unintended consequences can be identified, and adaptive management applied as new information is revealed.		
	12	Permitting agencies should require applicants to evaluate the risk of the introduction and/or expansion of invasive species and develop a plan to prevent the introduction or expansion of invasive species. Applicants should also be required to prepare a pollution prevention and control plan that address how invasive species will be contained if they are inadvertently introduced or allowed to spread.		
	13	Permitting agencies should require applicants to prepare an evaluation of ballast water and should enforce ballast water requirements to ensure it does not introduce invasive species.		

II. Additional Issues Related to Specific New Uses

A. OFFSHORE AQUACULTURE ISSUES

The infrastructure and activities from offshore aquaculture could result in entanglement or other harm to species, particularly to predators such as pinnipeds, cetaceans, and sharks. The infrastructure could also provide habitat and food sources for marine species, possibly attracting fish and other species away from marine habitats. Offshore aquaculture may introduce new species and diseases into the environment, potentially harming existing populations and ecosystems. Fin-fish aquaculture could have economic, ecological and spatial impacts on existing fishing.

		Recommendation Options	Red Dots	Green Dots
A. Offshore Aquaculture	1	Permitting agencies should require applicants for offshore aquaculture to prepare plans to minimize entanglement and to deter or avoid impacts to predators such as pinnipeds, cetaceans, and sharks.		
	2	Permitting agencies should require applicants for offshore aquaculture to prepare escapement prevention and response plans.		
	3	Permitting agencies should require applicants for offshore aquaculture to prepare disease prevention and response plans, including the introduction of pharmaceuticals for pest control and disease prevention.		
	4	Permitting agencies should require applicants for offshore aquaculture to prepare nutrient pollution prevention and response plans.		
	5	Permitting agencies should not permit offshore aquaculture species that have a significant risk of introducing disease or illness into the area.		

III. Additional Issues Related to Protecting and Preserving Existing Uses

Stakeholders are concerned that new uses could irrevocably change their communities. Stakeholders would like to have input into the decision-making process, including input to applicants as they develop proposals and applications, and input to permitting agencies as they review applications, develop permit conditions, and make final decisions.

Impacts to Fishing and Aquaculture

New uses could degrade or alter existing fisheries and aquaculture through:

- Displacement of fishing grounds;
- Changes to current flows, altering the food chain, bottom conditions, estuary functions, etc.
- Changes to the behavior of species which will stress other populations, including the food chain.
- Water quality degradation (chemicals, petroleum products, nutrients, oxygen, temperature, acidification, etc.)
- Disposal of dredge or mining deposits which covers or disturbs species habitat and/or damages fishing gear.

There is concern that new uses could result in a net loss to fishing. New uses could preempt existing fishing space, resulting in smaller fishing areas. Smaller fishing areas lead to overcrowded and dangerous fishing activities as well as loss of fishing.

Recreation

New uses could degrade recreational opportunities and access by:

- Negatively impacting public safety
- Limiting beach access
- Altering bathymetric features that influence wave action which could potentially:
- Increase wave hazards
- Reduce wave quality in surf locations
- Diminishing the recreational experience due to:
- Viewshed degradation
- Negatively impacting ecological resources valued by recreational users (wildlife viewing, etc.)
- Reducing water quality and thus the ability to safely access the water

	Recommendation Options	Red Dots	Green Dots
1	Permitting agencies should require applicants to work collaboratively with fishing and aquaculture interests to identify and mitigate potential impacts.		
2	Permitting agencies should require applicants to provide stakeholders detailed information and timely notice on project developments. The notice should be posted to websites and other locations that are familiar to stakeholders, and not be limited to state or federal registers.		
3	Applicants should initiate both formal and informal processes to involve stakeholders in pre-application decisions, so applicants can hear and respond to the concerns of stakeholders.		
4	Permitting agencies should require applicants to prepare site-specific impact assessments addressing impacts to current uses, including fisheries and aquaculture, prior to permitting.		

	Recommendation Options	Red Dots	Green Dots
5	Permitting agencies should prohibit new fixed uses or mining from coastal marine waters except in small discrete areas specifically designated as "high intensity use areas" that shall not exceed a total of 1.14 square miles of Washington's coastal marine water not including existing port facilities in the total square mileage.		
6	Local Shoreline Master Programs should be considered in permitting decisions and in the Coastal Zone Management Program in a timely manner.		
7	Adopt a prohibition or moratorium on new uses that preempt significant fishing space until there is more proof of the utility of the new use (does it make economic sense, have long-term feasibility, fill a clear need, etc.). This may be linked to specific spatial recommendations so that some areas of the coast have greater restrictions than others.		
8	Create a fishing advisory board that works with project proponents to provide advice on siting and construction of other uses in marine waters. The board should identify potential adverse impacts of other uses on commercial and recreational fishermen and fisheries activities. The board would need to have real influence, and serving on the board cannot impede fishing advocates from working against proposed projects (i.e., it cannot be used as a way to shut down opposition to new projects). It may be beneficial to have other stakeholders beyond just fishing interests.		

Economic Recommendation

Problem Statement

New uses (including significant expansion of existing uses) may have acute and cumulative impacts on the local economy, both positive and negative. There is concern that some new uses may have short-term economic gains followed by long-term economic loss due to displacement of current uses by short-term projects (such as pilot projects or abandoned or failed projects). Additionally, a new use may result national or global economic gain, but a significant economic loss at the local level. Local stakeholders and affected parties would like a clear understanding of the potential positive and negative impacts of new uses prior to the use being permitted.

Recommendation

The goal of this recommendation is to provide clear information on the economic costs and benefits prior to projects being permitted, and to not permit projects when local costs significantly exceed local benefits.

A. Prior to permitting significant new uses or expansions of existing uses which may cause significant impacts to either existing uses or to the local economy, an economic assessment should be completed. The assessment should include:
   1. Process
      - Early stakeholder notice, including a detailed description of the project proposal.
      - A designated time period for review and comment that provides time for stakeholder input at key stages throughout the project.
      - A clear timeframe for response to comments.

   2. Methodology
      - The assessment should be prepared by neutral party independent of project proponents.
   3. Content
      - An assessment of short-term and long-term costs and benefits.
      - An assessment of the economic costs and benefits to the local community, including social costs and benefits.
      - As appropriate, an assessment of the costs and benefits to the larger economy (state, national, global).
      - An assessment of various scenarios, including scenarios where the new use fails and is abandoned or decommissioned.

B. New uses or expansions of existing uses should not be permitted if the local economic costs significantly exceed the local benefits. The determination of costs and benefits should not be completed without meaningful input from local stakeholders and affected parties.

Staff Recommendation on Next Steps

- Based on the input from the dot exercise, staff will rewrite the draft WCMAC recommendations in a similar format to the economic recommendation (narrative problem statement, bulleted recommendation).
- Staff will identify areas where:
    - There is no recommendation to match a problem statement (and new ideas are needed)
    - New options have been proposed by WCMAC members (such as in the dot exercise)
- The Technical Committee will meet to review the revised draft recommendations and recommend revisions. The proposed Technical Committee dates are Wednesday, March 10 (during the normal Technical Committee meeting time) and an extra meeting on Wednesday, March 30.
- If needed, small groups may meet to develop new options or refine existing options, particularly for topics where new ideas are needed.
- WCMAC will spend the majority of the April 20 meeting reviewing and refining the final list of recommendations.

Discussion Guide

WCMAC Meeting

Wednesday, February 10, 2016

Review and Discussion of Seafloor Mapping Funding Opportunity

Background

In the last biennium, the marine spatial planning effort supported a seafloor mapping spatial prioritization effort to identify gaps in and priorities for bathymetric and seafloor habitat data. The coastal managers and scientists who participated in this effort identified areas of priority interest (Fig. 1) for seafloor mapping and reached consensus on a seafloor mapping strategy. As a result of this effort, Washington has attracted NOAA support to conduct mapping this year off of the Washington coast.

NOAA will be bringing the NOAA offshore hydrographic survey ship *Rainier* to Washington in October 2016. Small launches used for nearshore surveys will also be available, as weather allows. NOAA will be funding some of the sea time at approximately $15,000 per day, but is seeking additional funding from various offices in NOAA, foundations, and universities. NOAA has asked whether marine spatial planning funds could support a number of sea days upon the recommendation of the WCMAC.

The *Rainier* will focus its mapping efforts on the three offshore priority areas (Fig. 1) identified in the Summary Report for Spatial Prioritization Seafloor Mapping for Washington's Pacific Coast (2015). These areas were identified as important locations needing additional seafloor mapping data based on input provided by Federal, State, Tribal, Academic and NGO groups. Under optimum conditions, precluding weather, mechanical or other extenuating factors, NOAA anticipates that the North area will take 2.5 days, Central (Quinault Canyon) 13 days, and South (Guide and Willapa Canyons) 7 days. (NOAA does not yet know how many days the *Rainier* will be available in October.)

This project will conduct a habitat mapping and characterization survey of the identified areas with emphasis on bathymetry, backscatter, and sidescan imagery to produce high resolution geomorphology, sediment profile, and imagery. A complete benthic survey and habitat classification can determine the balance between protecting fragile natural resources and maintaining the economic viability of coastal fishing communities. Examples of data applications include (see Appendix A for visual examples of data applications):

- Fisheries management
- Tsunami hazard mapping
- Identifying upwelling
- Identifying sensitive species and habitats

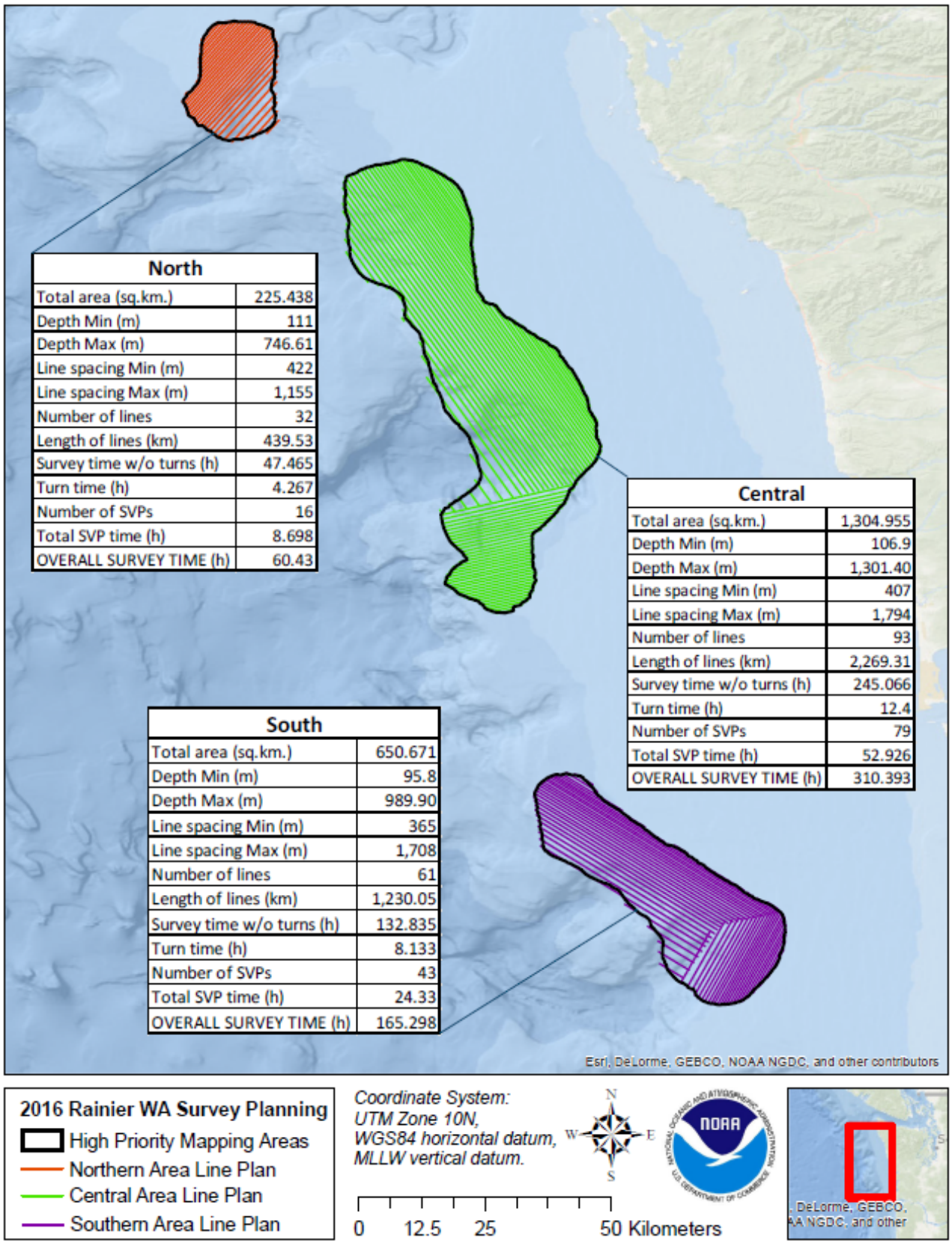


Figure 1. WA High Priority Mapping Areas

Recommendation of the State Ocean Caucus (SOC)

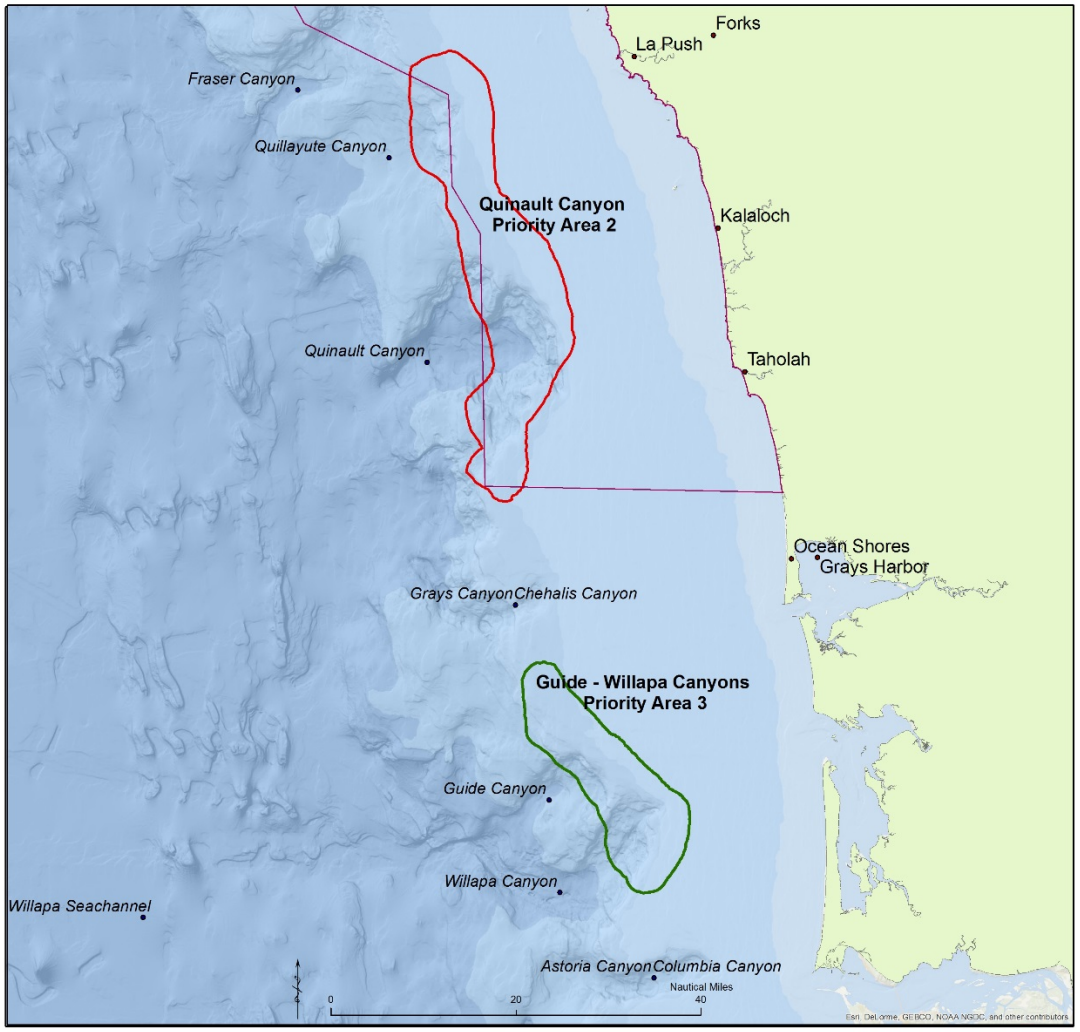
The State Ocean Caucus (SOC) recommends that WCMAC allocate $75,000 toward additional sea floor mapping. The SOC also recommends that WCMAC request that this money be allocated for mapping the southern part of the coast, outside of the Marine Sanctuary.

Question for WCMAC

Do you have any questions or need any additional information to make a decision at the next meeting?

Appendix A
Data Applications

NOAA Ship Rainier Survey, October 2016



Quinault Canyon (Area 2) Survey Priorities

1. Living Resource Management: Knowledge Gap Existing Infrastructure
2. Ecosystem-Based Management: Significant Natural Area, High Use Area
3. Multiple Use
4. Coastal Inundation
5. Safety and Navigation

Quinault Canyon Survey Details

Survey Depth: 100 - 1,300 meters
Survey Area: 1,304 sq. km.
Survey Time: 310. 4 hours
Survey Days: 13 (24/hr) days

Project Details

The Seafloor Mapping Priority Areas were delineated during the 2015 multi-agency Washington State Seafloor Mapping Prioritization Workshop.

The RAINIER Survey has two legs, from April 7 to May 13, allocated to WA Outer Coast. Complete mapping of priority areas is based on funding and weather.

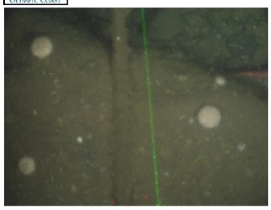
Guide/Willapa Canyons (Area 3) Survey Priorities

1. Ecosystem-Based Management: Multiple Use Knowledge Gap, High Use Area, Potential Infrastructure Development
2. Coastal Inundation: Significant Natural Areas
3. Living Resource Management: Knowledge Gap
4. Safety and Navigation: Multiple Use

Guide & Willipa Canyon Survey Details

Survey Depth: 96 - 990 meters
Survey Area: 651 sq. km.
Survey Time: 165.3 hours
Survey Days: 6.9 (24/hr) days

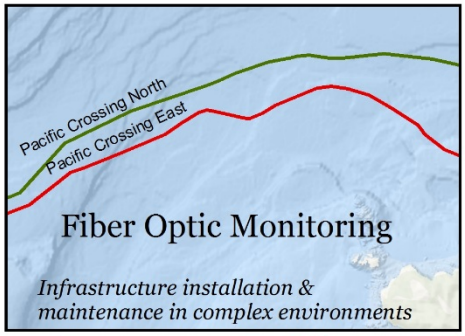
SEAFLOOR MAPPING APPLICATIONS, WASHINGTON

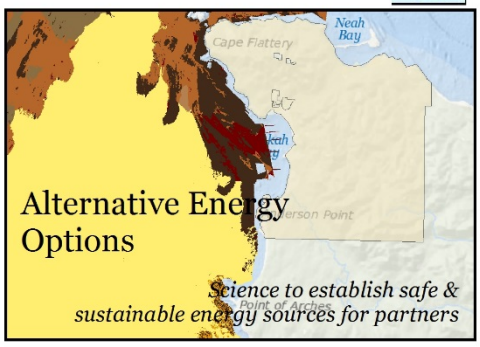


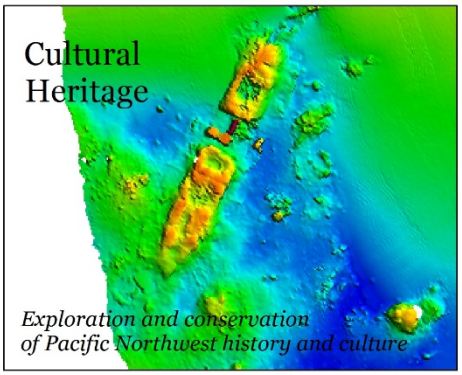
Hard Substrate with Fiber Optic Cable

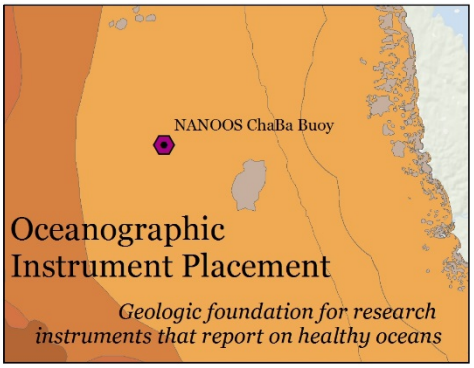
Mixed Gravel Substrate

Coarse Sand Substrate

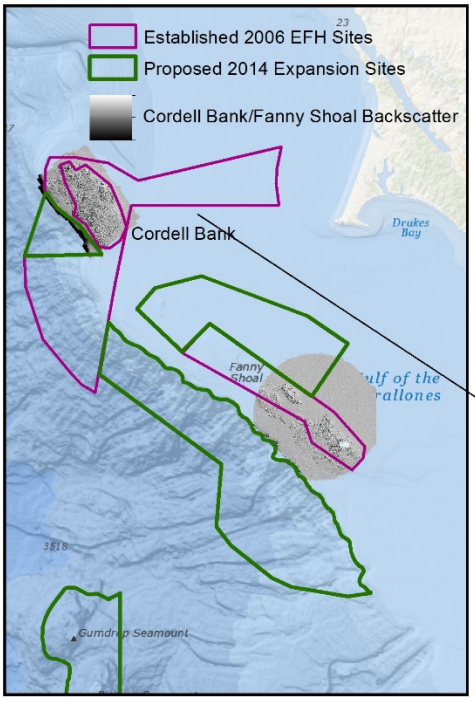






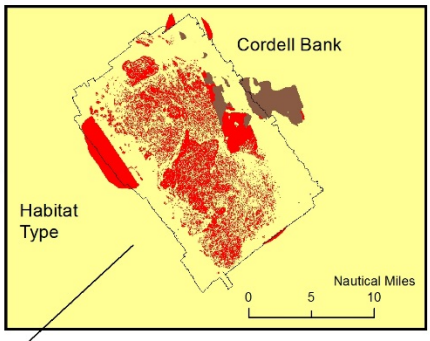


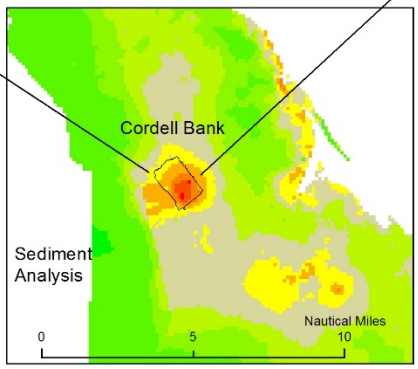
SEAFLOOR MAPPING AND ESSENTIAL FISH HABITAT DELINEATION, CALIFORNIA

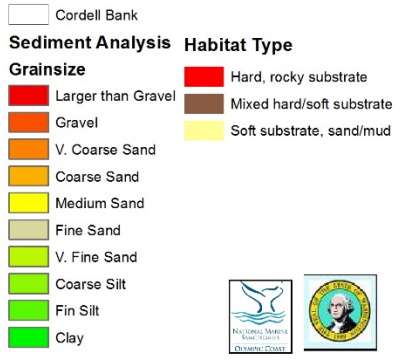


The location of appropriate geography for Essential Fish Habitat is based on an understanding of the seafloor and the biological communities that depend on benthic habitats. Seafloor mapping that includes bathymetry, backscatter, ground truthing, and habitat characterization helps scientists and managers protect fragile habitats, understand changing ecosystems, and encourage healthy fisheries.

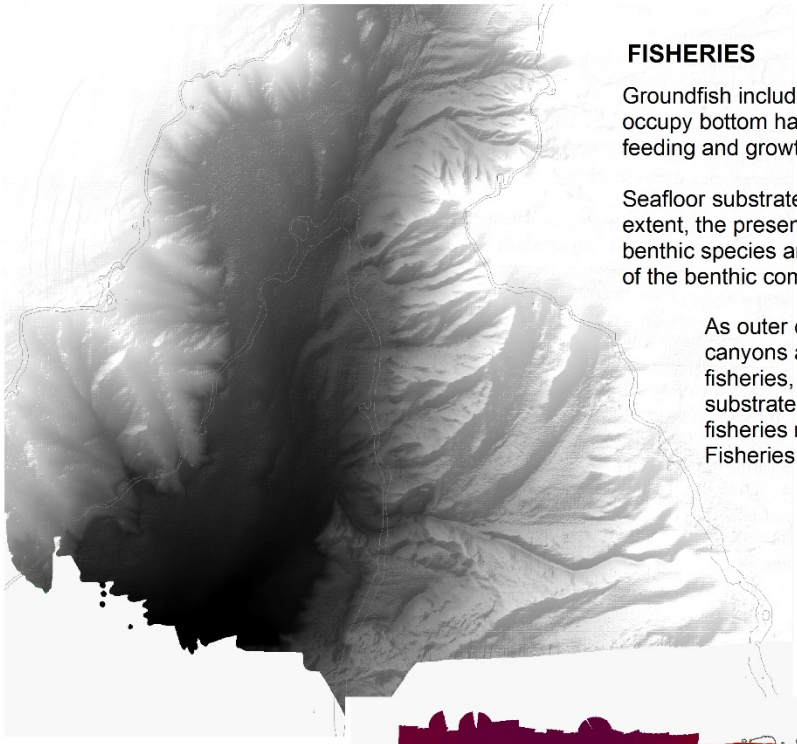
Cordell Bank and Fanny Shoal are two well-surveyed rocky areas off California's central coast.







JUAN DE FUCA CANYON, MULTIBEAM & BACKSCATTER
EXAMPLE OF VALUABLE CANYON HABITAT MAPPING



FISHERIES

Groundfish include 82 marine species that occupy bottom habitats for spawning, breeding, feeding and growth.

Seafloor substrate determines, to a large extent, the presence or absence of a particular benthic species and susceptibility to disturbance of the benthic community.

As outer continental shelf banks and canyons are targeted by commercial fisheries, bathymetry (depths) and seafloor substrate are critical information to support fisheries management by the Pacific Fisheries Management Council and others.

Depth Contours:
200 meter shelf break
650 meter approx. canyon floor

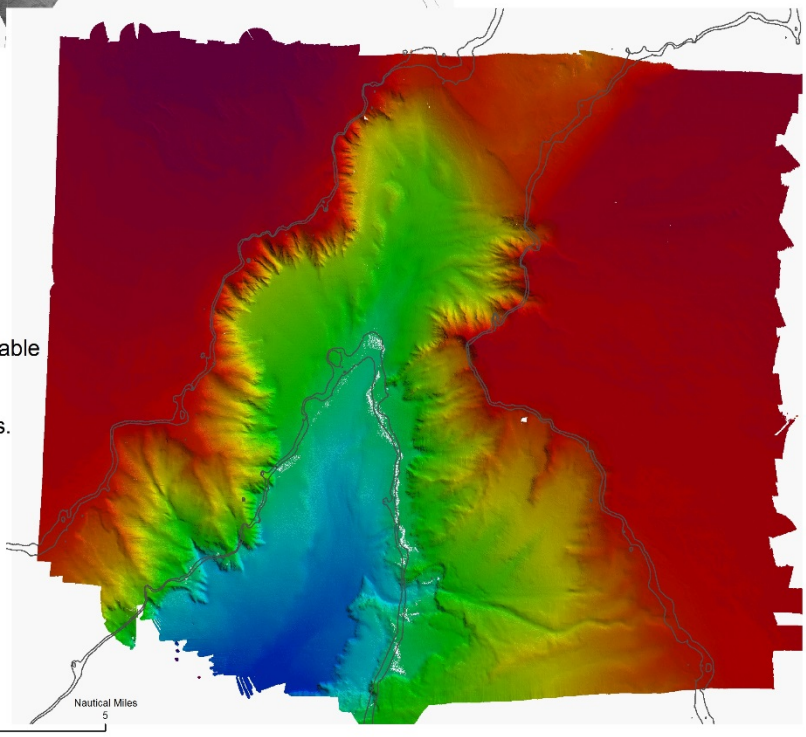
Elevation Model (depth in m)

High : -115.792
Low : -960.797

SEAFLOOR MAPPING

Seafloor mapping is the first step in characterizing an area, and it provides the foundation for ecosystem-based management.

When combined with seafloor habitat characterization and species-habitat associations, seafloor mapping supports sustainable fisheries management, monitoring for environmental change, and other economic and scientific goals.



Geomorphology

Sediment types

Shelf: gravel mix
Flank: mud rock
Bottom: mud

February 10, 2016

Washington Coastal Marine Advisory Council
Draft Work Plan: Meetings through June 2016

The WCMAC work plan is a living document. It will be continually updated and used as a guide for planning WCMAC meetings. WCMAC members are encouraged to identify agenda requests as early as possible.

Meeting	Information	Advice/Action
February 10, 2016	• Use Analysis – comparison maps and recommendations (continued) • General MSP recommendations (Technical Committee) • MSP outreach update	• Develop general MSP recommendations (continued) • Develop spatial MSP recommendations • Input on MSP outreach
April 20, 2016	• Use Analysis – comparison maps and recommendations (continued) • General and spatial recommendations (continued) • Update on draft MSP release	• MSP – WCMAC recommendations
June 15, 2016	• Update on draft MSP release	• Finalize WCMAC recommendations
September 28, 2016	• TBD	• TBD

Other information needs to fit in:

- Background on state vs. federal jurisdiction.
- Lessons-learned from other planning processes.

Other topics, issues, or recommendations may be addressed through the process set up by the Council and as time and resources allow.

Discussion Guide
Election of WCMAC Leadership

February 10, 2016

This discussion guide provides background on how WCMAC selects persons for leadership positions within WCMAC.

1. Chair and Vice Chair

WCMAC's enabling statute contains this language regarding election of a chair:

> *The chair of the Washington coastal marine advisory council must be nominated and elected by a majority of councilmembers. The term of the chair is one year, and the position is eligible for reelection (RCW 43.143.050 (4))*

WCMAC's bylaws state:

> *The Council shall nominate and elect a Chair and Vice Chair from its membership. Nominees for these positions should commit to providing sufficient time to fulfill assigned duties. The term of the Chair is one year and the position is eligible for reelection. The Council is encouraged to elect new leadership after a Chair or Vice Chair has served two consecutive terms. The Council shall consider geographically diverse representation in selecting these two positions. (IV. B. a)*

Current Officers:

Chair Garrett Dalan, Vice-Chair Doug Kess

Next Steps

WCMAC members were asked to submit nominations for WCMAC Chair and Vice Chair at the December WCMAC meeting. The current chair and vice chair were re-nominated; no other nominations were received.

Decision

WCMAC will be asked to affirm the re-election of Garrett Dalan and Doug Kess as Chair and Vice-Chair.

2. Steering Committee

WCMAC's bylaws state:

> *The Steering Committee will be comprised of the Chair of the Council, Vice-Chair of the Council, the Governor's representative, and two members-at-large. The members at large will be nominated by the Steering Committee and confirmed by the Council. In nominating the member at large, the Steering Committee will consider balancing geographic and interest group representation on the Steering Committee. (III. A. i. a))*

Current Steering Committee Members:

Garrett and Doug (chair and vice-chair), Julie Horowitz (Governor's Rep) and at-large members Mike Rechner and Rod Fleck.

Next Steps

The Chair, Vice-Chair, and Governor's representative will nominate the two at-large Steering Committee members. If you would like to serve on the Steering Committee or would like to recommend a WCMAC member for the Steering Committee please let Jen, Susan or Julie know.

3. Technical Committee

WCMAC's bylaws state:

> *The Council will appoint 2-3 co-leads for the Technical Committee. The leads will commit to ongoing participation in Technical Committee meetings and will work with neutral convener and staff in preparing agendas for Technical Committee meetings.*
>
> *At least one Steering Committee member should participate in Technical Committee meetings if possible. (III. A. ii. d-e))*

Current Technical Committee Co-Leads:

Brian Sheldon and Rich Osborne

Next Steps

At the April meeting, WCMAC will confirm the Technical Committee leads. If you would like to serve as a Technical Committee lead, or would like to recommend a WCMAC member as a Technical Committee lead, please let Jen or Susan know.