

WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

AGENDA

Wednesday, June 13, 2018 9:30 am – 3:30 pm

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

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 <ul style="list-style-type: none"> Welcome by Chair Garrett Dalan Introductions Review agenda ! Adopt summary of March 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	Coastal Updates <ul style="list-style-type: none"> MRC Updates Agency Updates General Coastal Updates 	Information	Susan Gulick, Facilitator WCMAC Members
10:30	Marine Resources Advisory Council <ul style="list-style-type: none"> Overview of MRAC, its recent activities, and upcoming efforts Overview of ocean acidification science Agency-specific efforts and the natural resource managers survey of priorities WCMAC Questions and Discussion 	Information, Discussion <i>Reference Materials:</i> <ul style="list-style-type: none"> MRAC fact sheet 	Martha Kongsgaard, MRAC Chair Jan Newton, UW Richard Feely, NOAA PMEL Kirsten Feifel, DNR Rich Childers, WDFW WCMAC Members
12:00	Morning Public Comment		
12:15	LUNCH		
12:45	MSP Update <ul style="list-style-type: none"> Status report on Final MSP 	Information, Discussion	Jen Hennessey, Ecology
1:00	Tsunami Preparedness <ul style="list-style-type: none"> Presentation: "Prepare for tsunamis: science and tools to help us survive the big one" WCMAC Questions and Discussion 	Information, Discussion <i>Reference Materials:</i> <ul style="list-style-type: none"> Geology in the Public Interest Geologic Info. Portal 	Daniel Eungard, DNR
2:00	Damon Point Planning and Restoration <ul style="list-style-type: none"> Presentation and discussion with DNR 	Information, Discussion	David Palazzi, DNR Birdie Davenport, DNR
2:45	Bylaws Revisions and Steering Committee Members <ul style="list-style-type: none"> ! Adopt proposed revisions to by-laws to allow "two to four" at-large members to serve on the Steering Committee ! Confirm Steering Committee membership 	Action <i>Reference Materials:</i> <ul style="list-style-type: none"> Revised Bylaws SC Membership List 	WCMAC Members
3:00	Coastal Resilience Update <ul style="list-style-type: none"> Report from Work Group 	Information <i>Reference Materials:</i>	Bobbak Talebi, Ecology
3:10	Afternoon Public Comment	Information	Public/Observers
3:20	Other Issues <ul style="list-style-type: none"> WCMAC Workplan Webinar on salmon surveys and ocean conditions 	Information <i>Reference Materials:</i> <ul style="list-style-type: none"> WCMAC Workplan 	Staff/WCMAC Members
3:25	Upcoming Meetings <ul style="list-style-type: none"> Reminder of Dates and Times for Future Meetings Agenda Topics for Next Meeting Agenda Topics for Future meetings 	Information	Susan Gulick
3:30	Adjourn		Garrett Dalan

Upcoming Meetings

- Wednesday, September 26, 2018
- Wednesday, December 12, 2018

Meetings are held in Aberdeen unless otherwise noted

WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

Draft Summary

Wednesday, March 28, 2018 9:30 am – 3:30pm

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](#)

Council Members Present	
Garrett Dalan, Grays Harbor MRC	Mike Passmore, Wahkiakum MRC
Rich Osborne, Science	Randy Lewis, Ports
Jessica Helsley, WCSSP	Michal Rechner, DNR
Casey Dennehy, Recreation	Joshua Berger, Dept. of Commerce
Alla Weinstein, Energy	Rod Fleck, N Pacific MRC
Mike Cassinelli, Recreational Fishing	RD Grunbaum, Conservation
Larry Thevik, Commercial Fishing	Mark Plackett, Citizen
Penny Dalton, Sea Grant	Jeff Ward, Coastal Energy
David Fluharty, Educational Institution	Tiffany Turner, Econ. Development (via phone)
Dale Beasley, Commercial Fishing	Sally Toteff, Dept. of Ecology (via phone)
Doug Kess, Pacific MRC (via phone)	

Council Members Absent	
Brian Sheldon, Shellfish Aquaculture	Corey Niles, WDFW
Charles Costanzo, Shipping	J.T. Austin, Governor's Office

Liaisons Present	

Others Present (as noted on the sign-in sheet)	
Katrina Lassiter, DNR	Brian Kirk, Ecology
Jennifer Hennessey, Ecology (WCMAC Staff)	Susan Gulick, Sound Resolutions, Facilitator
Jackson Blalock, The Nature Conservancy	Kevin Decker, WA Sea Grant
Gus Gates, Surfrider Foundation	Herb Bezeley, Applied Ocean Energy
Vladimir Shepsis, Applied Ocean Energy	Melissa Watkinson, WA Sea Grant
Wendy Largent, Hoh Tribe	Marie Novak, Cascadia Consulting, Note-taker
Melissa Poe, Washington Sea Grant	Scott Ferguson, Ecology

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.

Updates

- Penny Dalton announced she would be retiring and this will be her last WCMAC meeting. Washington Sea Grant is searching for a new Executive Director and welcomes candidate suggestions.
- Dave Fluharty distributed copies of a book that he co-authored, *State & Local Influence Over Offshore Oil Decisions*.
- Dale announced that a National Buoy Data Center has information on offshore buoys. He will provide more information.
- RD Grunbaum announced that the Friends of Grays Harbor (FOGH) are in the process of developing a water quality monitoring effort for Grays Harbor and Willapa Bay, and will be making an announcement in next 4-6 months.
- Melissa Poe announced that Washington Sea Grant is working on a social indicators project on the Olympic coast as part of an ocean acidification vulnerability assessment project, as well as a project to understand response to coastal changes on the northwest fishing fleet.

December Meeting Summary

Susan asked for edits to the December meeting summary.

- Larry Thevik requested that his comment on page 2 related to the vessel traffic risk assessment for Grays Harbor be revised to reflect his point that he recognized the importance of and need for the assessment but that expediting the study might not have been the best use of public funds at this time.
- ! The December meeting summary was adopted with the above change.

Coastal Updates

MRC Updates

- Rod Fleck announced that N. Pacific Coast MRC has a coast cleanup event Apr. 21 as well as a Rainforest Arts Festival that weekend, including the fifth annual River and Ocean Film Festival. He encouraged people to submit a short film or project next year. He also noted that a group of cities, counties, tribes, and the port all collaborated to submit a collective proposal for opportunity zone designation under the new federal tax law which would encourage private investment in low income communities. Once Washington communities are selected, Rod would like to present on this at a future meeting.
- Casey Dennehy encouraged everyone to attend one of the several beach cleanup events on Apr. 21 along the coast. He also thanked everyone who participated in hearings or commented in opposition to oil and gas leasing.
- Mike Cassinelli shared that Pacific County's Annual Science Conference is May 19.
- Mike Passmore commented that the MRCs are having conversations with WDFW on funding provided to MRCs. They are concerned that they need more flexibility on grant proposals and the processing of funds.

Agency Updates

- Jen noted that many agencies including DNR and Ecology submitted comments on oil and gas leasing. The group was interested in seeing those compiled comments; Jen will create a pdf and distribute.
- Joshua followed up on Rod's comments about collaboration between tribes, cities, counties, and the port for the opportunity zone designation. The Governor's Maritime Innovation Advisory Council is developing a strategy for a sustainable "blue" economy and maritime industry.
- Mike Rechner shared a new Rural Communities Partnership recently kicked off by DNR, which includes \$3.5 million for projects. The first three projects have been selected, including 1) reopening of a hardwood mill, 2) research on burrowing shrimp control in Willapa Bay, and 3) creating a facility for derelict vessels in Ilwaco. There is \$3.5 million allocated for these projects.

- Penny announced that Washington Sea Grant received funding in the Governor's budget for a three year study on ecosystem-based management for resources in Willapa Bay, and also applied to the federal government for a grant.

MRAC

- Garrett will forward an email he received on changes in male sand fleas due to ocean acidification. The 2017 Addendum to Washington's strategic response for ocean acidification. This document updates the original Blue Ribbon Panel work and is available online (www.OAinWA.org) and will be an agenda item at the May 19 Pacific County Science Summit.

Other coastal updates:

- Susan reviewed the letter from the Governor which was included in the meeting materials. The letter thanked WCMAC members for their work on the MSP. It also provided WCMAC with its charge for the next few years.
- Larry followed up to his comment from last meeting about oil and gas shipments. He announced that both existing permits he referenced for crude oil export have been withdrawn, but also noted that the BOEM announcement about the intention to lease federal waters for oil and gas exploration remains a threat.
- Randy announced that the Army Corps issued an RFP to identify ten beneficial uses for dredge material. The Port of Grays Harbor just submitted a proposal for pilot projects to take dredge material from the entrance channel and do direct beach placement on either side of the jetties at the mouth of Grays Harbor. The proposal would fund the additional cost of obtaining a dredge with that capability.
- Mark Plackett commented on positive signs of economic growth and viability of the north coast, including an increase in building permits and real estate sales.
- Jess announced that an RFP for the Washington Coast Restoration Initiative will be released next month and encouraged people to review it and apply, she noted the RFP will expand to include projects that encompass coastal resilience.
- Jeff Ward noted that at the last Clallam MRC meeting, John Gussman, a local videographer who did the *Return of the River* documentary on the Elwha River, demonstrated some of his work with drones to support scientific studies and recommended him as a future speaker.

Renewable Hydrogen Energy from Waves in the North Pacific

Dr. Vladimir Shepsis of Applied Ocean Energy Corporation gave a presentation on his project to develop renewable hydrogen fuel from wave energy and water in the north Pacific. His objective is to conduct field testing of his prototype offshore of Grays Harbor (3-4 nautical miles) for 3-6 months to determine how much hydrogen fuel can be produced using this technology.

The presentation is included in the meeting materials posted on the [WCMAC Website](#).

Discussion and questions

- Mark Plackett asked if ocean water would be used for hydrolysis; Dr. Shepsis clarified that fresh water would be used for the prototype testing but eventually sea water would be used.
- Garrett asked about efficiency of conversion of hydrogen as a fuel back to grid electricity. Alla Weinstein responded that this technology exists and is currently more economical than for diesel fuel.
- Alla commented that due to space constraints and competing uses, testing this technology in Washington could be difficult. There is an area in Oregon (Pacific Marine Energy Center – South Energy Test Site) already permitted for research and encouraged him to conduct testing there.
- Jeff Ward commented that this technology would be interesting to integrate into an existing offshore wind farm, such as the one already operating in Rhode Island.

- Larry echoed comments about spatial concerns for testing in Washington waters, as well as the timing of testing that could interfere with various fisheries. He also recommended testing in Oregon.
- Alla added that this technology would be classified as wave energy and fall under FERC jurisdiction (hydrokinetic energy installations beyond state waters), which could add another layer of complexity to the permitting process.

MSP Update

Jen provided a status update on the MSP. Since the December meeting, their team has been working on responses to public comments. Staff resources are currently limited, but they still plan to release it soon.

Discussion and questions

- Dave asked if there was a formal release plan for the MSP. Jen responded that they are conducting an EIS along with the MSP and there will be a formal announcement and opportunity for appeals as part of the SEPA process. The Governor will announce the Plan's release and then will rely on this group and partners for help with ongoing education and outreach.
- Casey asked about the timeline for federal approval. Jen was unsure but said they have done as much as possible to ensure that federal approval to incorporate it into the state's Coastal Zone Management Program. She does not anticipate issues with the proposed additional Enforceable Policies and noted that the application for a Geographic Locator Descriptions will require a separate document.

Public Comment #1

- No public comments were registered.

Vessel Traffic Risk Assessment

Brian Kirk and Scott Ferguson of the Department of Ecology provided an overview of the Grays Harbor Vessel Traffic Risk Assessment. Through this process they are assessing oil spill risks, hazards, response preparedness, and response capability. They have conducted two workshops and will conduct two more and plan to release a report in June with an opportunity for public comment, which Jen will distribute to the group.

The presentation is included in the meeting materials posted on the [WCMAC Website](#).

Discussion and questions

- RD asked whether they considered cargo hazards in addition to potential for an oil spill. Scott responded that they did not. RD then asked whether Contanda, REG, and BHP's proposals for crude oil export were included in the assessment. Scott responded that as of Feb. 28, only Contanda and BHP had submitted permit applications and their scope document said they would consider projects with permits on file at the time of the workshop.
- Mark asked why they had elected not to do a quantitative risk analysis, and Scott clarified that they did not feel there was a discontinuity of risk in Grays Harbor compared to other areas that would require additional analysis. A full assessment of this nature is very time and resource intensive.
- Larry commented that he is a member of the working group but missed the second workshop. Without a discussion of non-oil cargo hazards, he feels this product will not be as complete as it ought to be. Brian clarified that cargo would be included in the discussion of preparedness and response since cargo would be involved in a collision and they recognize that different cargos present different hazards once a collision occurs. However, the initial focus is on what hazards might be present that would lead to a spill of oil products and oil cargos. Garrett added that different cargo types might fit well in the next workshop on preparedness.

Bylaws Revisions

Susan reviewed the recommended bylaw revision; a discussion guide was included in the meeting materials with proposed changes. The Steering Committee would like to establish a voting mechanism for providing meaningful recommendations that demonstrate general agreement between coastal constituencies, as well as a structure for votes taken when several members do not vote due to absences and recusals. The Steering Committee recommends changing the bylaws to require a minimum of 12 affirmative votes and a 2/3 majority of those present to approve a recommendation.

Discussion and questions

- Mike Rechner suggested clarifying a “minimum of 12 **affirmative** votes” in section E. b) V.ii..
- Mark suggested replacing “captured” with “**reported**” in the same section.

Susan asked for approval on the suggested changes with the above modifications. Dale recused himself, and all others present were in favor

! The revision to the bylaws was approved.

Coastal Resilience Issues

Jen provided an update on the Department of Ecology’s grant proposal to NOAA for economic workshops and science synthesis work related to coastal resilience. The proposal was not funded, but they will continue to explore other opportunities for coastal resilience work.

Susan discussed the recommendation from the Ruckelshaus report around increasing flexibility of regulatory approaches. The coastal resilience work group proposed that WCMAC sponsor a two-part survey to: 1) identify regulatory hurdles or areas where flexibility would be beneficial by brainstorming with cities, tribes, ports, drainage districts, counties, agencies, MRCs, conservation districts, etc., and then 2) prioritize the list to identify key regulatory impediments or areas for improvement. More information about the survey framework is included in the discussion guide in the meeting materials. Bobbak and Susan would develop survey content in coordination with the Work Group but would require assistance executing and analyzing survey results. Susan asked if members supported the surveys and whether staff should move forward.

Discussion and questions

- Joshua asked about intent for survey results. Susan said the results would be for dissemination to decision-makers for the purposes of information sharing. The work group would determine if any action beyond that was warranted.
- Dave commented that the group should clarify flexibility with regard to *coastal resilience*, not just unpopular regulations. One way to deal with this issue would be to have survey respondents choose from a prepopulated list rather than allowing open ended responses. Penny suggested as a first step to conduct a fact-finding/storytelling exercise to compile a universe of potential responses and then develop the survey.
- The next step would be for Susan and Bobbak to send out a questionnaire for fact-finding. They would welcome input and review. Garret noted that MRCs would help with list of persons to include and also with content for the fact-finding questionnaire and the follow-up survey. .

For the economic workshops, the work group will discuss other potential funding sources or ways to move forward.

- There was extensive interest in finding a way to move forward with this part despite the grant setback, as this is a major coastal priority. Garrett expressed interest in engaging on economic development through his role at The Nature Conservancy and its Emerald Edge program. Joshua expressed interest in engaging Commerce for involvement as well as potential funding.
- Susan will remind Garrett to set up a conversation with Rod, Joshua, and anyone else interested on this subject. Garrett will then provide an update to the coastal resilience work group.

Coastal Resiliency and Dependence: Salmon

Members requested an update in Sept. on NOAA's juvenile salmon ocean survey work. Jen reached out to NOAA Northwest Fisheries Science Center staff who conduct this survey, but attending a WCMAC meeting in Aberdeen will be difficult due to staff capacity constraints. She asked if members would instead be interested in a live webinar that would also be recorded.

- Rich Osborne commented that much of this information is available on the WDFW website. The North of Falcon meetings are also a good source of this information as NOAA staff provide an overview of ocean conditions, and the meetings are open to the public.
- Mike Cassinelli noted that the NOAA Pacific Fishery Management Council is meeting in Portland on Apr. 4 and he could speak to someone from NOAA about attending a meeting.
- Members expressed interest in a webinar with live participation at various locations (e.g. Grays Harbor College and Olympic Natural Resources Center), which would also allow for more time that is often not available on the agenda during regular WCMAC meetings. Staff will move forward with setting up a webinar and coordinating with others on availability of local places to watch the webinar in small groups.

Coastal Oil and Gas Leasing

Garrett reviewed comments he received on the draft letter to the Governor regarding opposition to oil and gas leasing in coastal waters. The draft letter was included in the meeting materials. There were several changes suggested as well as discussion around whether the Washington federal delegation should be cc'd, including Sens. Murray and Cantwell and all ten representatives or just coastal representatives, as well as the Washington Attorney General.

- Garrett reviewed the following changes:
 - Add "**exploration**" between "oil and gas" and "leasing".
 - Add to paragraph 3: "**you Governor, the legislature, and state agencies**" and strike the last sentence.
 - Strike the minority leader if that seat is vacant.
 - Change "Coast" to "**Coastal**" in Washington Coastal Marine Advisory Council after Garrett's signature.
 - Change instructions to the legislature to instead encourage the legislature and state agencies.
 - CC the entire Washington federal congressional delegation.
- Garrett requested approval to send to the Governor pending inclusion of the changes noted above. Randy Lewis abstained, all others present were in favor
 - ! The letter was approved with the above noted changes for transmittal to the Governor.

Public Comment #2

- Jackson Blalock of The Nature Conservancy noted his support for resilience surveys and said it would be useful to clarify resilience to what (and for what), which would be beneficial in moving toward action. He also expressed support for the opposition to oil and gas leasing.
- Jen was contacted by Michelle Bender, the Ocean Rights Manager from the Earth Law Center who provided comments via email. She submitted a number of comments on the draft MSP, and also shared a vision paper about ocean health. Susan will distribute this paper with the meeting summary.
- Dale requested that a written document he provided be appended to the meeting summary. He summarized his comments noting that salmon harvest capacity has been dramatically diminished mainly due to a lack of hatchery production rather than changing ocean conditions. He is in favor of increasing hatchery production and noted that the Governor included increasing hatchery production levels in his budget.

Other Issues

Workplan

Susan provided updates on the WCMAC workplan, an updated draft of which was included in the meeting materials.

- Garrett commented that with new charge from the Governor, a column should be added to demonstrate which work plan elements align with that charge. Susan will add this column.
- The MSP must be adopted before implementation, as well as some of the additional work noted in the workplan.

Chair and Vice Chair Elections

Susan reviewed the bylaws section on Chair and Vice Chair duties and election process. Garrett Dalan was the only nominee for Chair who agreed to sit for election. Doug Kess, Jess Helsley, and Randy Lewis were nominated for Vice Chair. Voting sheets with results are attached to this meeting summary for public record. Brian Sheldon provided his proxy vote to Dale, and Corey provided his to Mike Rechner.

- ! Chair: Garrett was unanimously re-elected as Chair of WCMAC.
- ! Vice Chair: Jess was elected Vice Chair of WCMAC. She received 9 votes, Doug received 8 votes, and Randy received 3 votes. Garrett abstained.

Expansion of Steering Committee

Susan noted that some WCMAC members feel that the current size of the Steering Committee is too limited and would like to increase it from five to seven members. Currently the Committee consists of the Governor's representative, the Chair and Vice Chair, and two more members based on interest group and geographic diversity. The group could change the bylaws to say that up to four additional members (currently just two) would be chosen from the membership.

Discussion and questions

- Several members including Casey, Mark, and Rich supported expanding the Steering Committee with attention to geographic diversity. On the current Steering Committee, only Wahkiakum MRC is not represented.
- Garrett noted that this will require a two part action item at the next meeting: 1) bylaw modification to change wording from "2" to "2 to 4", and 2) confirm nominations for the Steering Committee. Members should email Susan and Garrett to nominate yourself or someone else to serve on the Steering Committee. If you currently serve on the Steering Committee and would like to continue, also let Garrett know.
- Dale expressed interest in joining the Steering Committee.

Upcoming Meetings

Susan solicited ideas for agenda topics for future meetings.

- Alla offered to provide an update on the Morro Bay wind project in December.
- Dave requested an update on the NANOOS (Northwest Association of Networked Ocean Observing Systems) observation project as well as the Integrated Ecosystem Assessment. Jen will follow up on this. Rich recommended these presentations for either the June or September meeting.
- Mark suggested inviting staff from the Ruckelshaus Center in June to discuss collaboration. Staff will find out what activities, if any, the Ruckelshaus Center is still doing related to this topic.
- Susan said the coastal resilience work group can provide an update in June.
- Dale requested updates on the results from on seafloor mapping data collection. Jen said that the data itself is not ready yet. NOAA and those that collected the data are still processing the data and developing data products. NOAA will let the state agencies know when the data is available, and the state agencies will pass along that information to WCMAC.
- Dave asked for a presentation in June from an appropriate body about tsunamis as a coastal hazard. Mike Cassinelli suggested that emergency management staff could provide a briefing about tsunami preparedness efforts. Randy recommended Chuck Wallace (Grays Harbor County) and Scott MacDougal (Pacific County) as potential presenters.

Meeting adjourned at 3:09 pm.

Summary of Decisions

- ! The December Meeting Summary was adopted with the approved change.
- ! The revision to the bylaws regarding voting was approved.
- ! The letter to the Governor was approved with approved changes for transmittal.
- ! Garrett Dalan was re-elected as Chair, and Jess Helsley was elected Vice Chair of WCMAC.

Upcoming Meetings

- Wednesday, June 13, 2018
- Wednesday, September 26, 2018
- Wednesday, December 12, 2018

Meetings will be held in Aberdeen unless otherwise noted



What is the Marine Resources Advisory Council?

Since 2013, the Marine Resources Advisory Council (MRAC) has served as Washington's state body dedicated to maintaining a sustainable and coordinated focus on ocean acidification.

MRAC's membership includes legislative, executive, and elected officials, tribes, nongovernmental organizations, and private sector. Representatives from academic institutions and federal agencies have also been invited by the Governor to participate. For a list of members, see reverse.

Why was MRAC formed?

Production failures between 2005 and 2009 at major Pacific Northwest oyster hatcheries saw billions of oyster larvae mysteriously die, followed by diminished wild Pacific oyster stocks. In response, the Washington State Legislature established MRAC and other entities to ensure ocean acidification was addressed in a strategic and comprehensive way.

What does MRAC do?

MRAC works across organizational boundaries to ensure ocean acidification work is efficient, leveraged, focused and becomes integrated into key programs across Washington state. Specifically, MRAC maintains a sustainable and coordinated focus on ocean acidification in Washington state by:

- Advising and working with the Washington Ocean Acidification Center (WOAC) on the effects and sources of ocean acidification
- Delivering recommendations to the Governor and Legislature on ocean acidification
- Seeking public and private funding resources to support the MRAC's recommendations
- Assisting in conducting public education activities regarding ocean acidification

Ocean acidification in Washington waters

Ocean acidification, also known as OA, poses a serious threat to Washington's marine economy, community, and environment. Here are some key facts:

- OA is the absorption of carbon dioxide (CO₂) by the ocean, resulting in a change seawater chemistry and a lower pH
- The current rate of acidification is several times faster than what has been observed over the past 50 million years
- This rapid pace of change gives marine organisms less time to adapt or evolve
- Atmospheric CO₂ in the Puget Sound area is increasing faster than on Washington's coast and faster than the global average
- Acidification has increased in Washington coastal waters over the last five years due to both global and local sources of CO₂

Leading the global fight against ocean acidification

In 2012, Washington developed the first comprehensive strategy for action to address ocean acidification. This strategy, developed by the Blue Ribbon Panel on Ocean Acidification and outlined in the report *Ocean Acidification: From Knowledge to Action*, created a global awareness of this critical threat to marine resources. The strategy's 42 recommended actions serve as a foundation of all MRAC's efforts, focusing on:

- Monitoring and investigations
- Adaptation and remediation
- Local land-based contributions
- Outreach and education
- Reducing carbon emissions
- Maintaining a sustainable coordinated focus

Alongside progress made at home, MRAC has worked with partners to elevate Washington state as a recognized leader on the regional, national, and global stages in the fight to address ocean acidification.

Recent work to maintain strategic momentum

In 2017, MRAC convened Washington's leading ocean acidification thinkers to evaluate progress, next steps, and potential revisions to the recommended actions identified in 2012. The 2017 Addendum to the Blue Ribbon Panel's report updates the comprehensive strategy based on emerging science, management practices, and the new global network of partners working on this challenge.

Access the full the 2017 Addendum at www.OAinWA.org



Current MRAC members

Martha Kongsgaard, Chair

Brian Allison, Puget Sound Commercial Crab Association

Maia Bellon, WA State Department of Ecology

Mike Cassinelli, City of Ilwaco

Rich Childers, WA Department of Fish and Wildlife

Mark Clark, WA State Conservation Commission

Rich Childers, WA State Department of Fish and Wildlife

Garrett Dalan, WA Coast Marine Advisory Committee

Tom Davis, WA State Farm Bureau

Bill Dewey, Taylor Shellfish Farms

Norm Dicks, Van Ness Feldman LLP

Tony Floor, Northwest Marine Trade Association

Hilary Franz, WA State Department of Natural Resources

Gus Gates, Surfrider Foundation

Lisa Graumlich, UW College of the Environment

The Honorable Dave Hayes, WA State House of Representatives

Libby Jewett, NOAA

Jay Manning, Puget Sound Partnership

Nan McKay, Northwest Straits Commission

Erica McPhee-Shaw, Western Washington Univ.

The Honorable Kevin Ranker, WA State Senate

Mindy Roberts, Washington Environmental Council

Marilyn Sheldon, Coastal Shellfish Grower

Douglas Steding, Assoc. of Washington Business

Terry Williams, Tulalip Tribes of Washington

For more information

Visit the MRAC website at www.OAinWA.org/MRAC or email info@oainwa.org

Geology in the Public Interest

The Washington Geological Survey contributes to the safety and economic well-being of Washington's citizens. We do this by educating the public, government, and industry about the consequences of geologic events. We also educate our stakeholders about the nature of the land around us, including active faults and

earthquakes, tsunamis, and the availability of important resources such as aquifers and sand and gravel. The Survey is the primary source of geological products and services in support of decision-making by Washington's government agencies, its businesses, and the public.

GEOLOGIC AND ENVIRONMENTAL HAZARDS

One of our most significant tasks is the identification and assessment of geologic hazards and the public outreach that helps educate and prepare our citizens. This information is crucial for planning as population growth increases the pressure to develop in hazardous areas, and as new active faults or landslides are discovered.

We develop and publish hazard maps that become critical tools for transportation, land-use, and emergency-management planning, as well as disaster response and building-code implementation. We also identify areas subject to ground failure, tsunami inundation, landsliding, lahars, volcanic hazards, and much more.



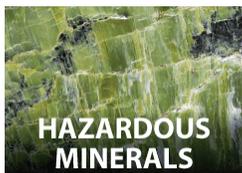
LANDSLIDES

Washington is one of the most landslide-prone states in the country, with hundreds to thousands of events each year.



TSUNAMIS

Tsunamis are large and destructive ocean waves caused by earthquakes, landslides, or volcanic eruptions. Tsunamis have happened in the past and will happen again in the future.



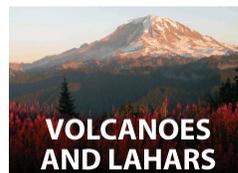
HAZARDOUS MINERALS

Certain minerals and rocks can contain naturally occurring elements—such as arsenic, asbestos, mercury, and radon—that can make them hazardous.



EARTHQUAKES AND FAULTS

Washington has the second highest risk in the country of large and damaging earthquakes because of its geologic setting.



VOLCANOES AND LAHARS

Washington's five major volcanoes are all active and four of them have erupted in the last 250 years.



INACTIVE AND ABANDONED MINE LANDS

Coal: There are >50,000 acres of land above abandoned coal mines.

Metal: There are >3,800 mines and prospects that were abandoned before reclamation and clean-up requirements.

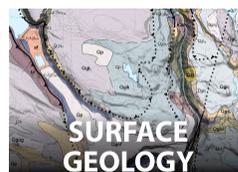
GEOLOGIC MAPPING

Geologic maps are used for a broad range of practical applications, including growth-management planning, transportation, dam safety, hazard and risk assessment, Puget Sound cleanup and restoration, water resource appraisals, resource use and protection, education, recreation, and scientific research.

We map hundreds of square miles of the state each year to better understand the hazards we face. We continually compile and update larger-scale mapping and make this data easily available. We also maintain a database of all publicly available subsurface data and continually work to improve access and content.

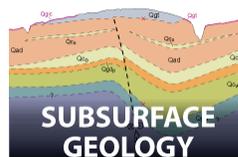


**WASHINGTON STATE DEPT OF
NATURAL
RESOURCES**



SURFACE GEOLOGY

Geologic maps show the types of rock at the Earth's surface, landforms (such as landslides or ancient deltas), and any faults or folds that have deformed those rocks or features.



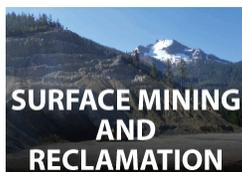
SUBSURFACE GEOLOGY

Subsurface geology is the study of the physical properties and location of rock and soil below the ground surface. It is critical for building structures safely.



REGULATION AND RESOURCES

The Survey administers the Surface Mine Reclamation Program under jurisdiction of the Surface Mining Act of 1978 (chapter 78.44 RCW). This program ensures that all lands and waters within the state are protected and reclaimed after mining is complete. Good reclamation enhances future use and limits environmental impacts.



**SURFACE MINING
AND
RECLAMATION**

Surface mining reclamation restores vegetation, soil stability, and proper water conditions after mining. There are about 1,100 active surface mines in Washington.



**AGGREGATE
RESOURCES**

Sand, gravel, or bedrock may be mined to produce 'aggregate' for use in concrete and asphalt. These products are necessary for building homes, businesses, roads, and bridges.



**COAL, METALLIC
AND MINERAL
RESOURCES**

Metallic and nonmetallic minerals are mined throughout the state and used by industry and in commerce. Coal production peaked in 2003, but there are currently no active mines.

The Survey also regulates drilling, geothermal, and other related activities under the Oil and Gas Conservation Act and under the Department of Natural Resources rules (chapter 78.52 RCW and chapter 344-12 WAC). Geothermal resources are regulated under chapter 78.60 RCW and chapter 332-17 WAC.



**RULES,
REGULATIONS
AND FORMS**

We maintain a comprehensive and easy-to-navigate set of all forms, rules, fees, and regulations on our website.



**OIL AND GAS
RESOURCES**

Although 600 exploratory wells have been drilled since 1900, there is currently no oil or gas production in Washington.

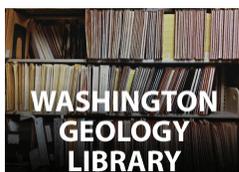


**GEO THERMAL
RESOURCES**

Geothermal energy is thermal energy stored in the earth. It has many uses, from residential and commercial heating or cooling to the generation of steam and electricity.

THE WASHINGTON GEOLOGY LIBRARY

Geologic research is time-consuming and can be initially expensive, but these reports retain their value and utility for many years. Our library has the state's largest collection of publications and theses about the geology of Washington. Cataloging, storing, and providing these items to the public provides an economic return to society many times the initial cost of the research.

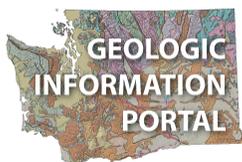


**WASHINGTON
GEOLOGY
LIBRARY**

The library contains over 80,000 items and more than 1,000 items are added each year. A full catalog and map index is available on our website or by visiting the library in Olympia.

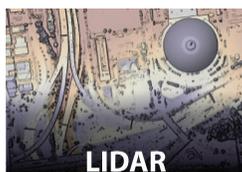
PUBLICATIONS, DATA, AND OUTREACH

One of the largest components of what we do is ensure timely communication of our work to all of our stakeholders, including the public. This increases public, organizational, and tribal awareness of the geology and geologic hazards of our state



**GEOLOGIC
INFORMATION
PORTAL**

Find geologic and hazard maps, tsunami evacuation routes, seismic scenarios, subsurface data, permit locations, and more on our portal.



LIDAR

We collect, distribute, and analyze lidar for Washington State. Our goal is high-quality statewide coverage for use in landslide hazard analyses, other geological analyses, and use by state agencies and the public.

Our timely delivery of geologic information also increases public safety by ensuring that the best-available science is used for planning and emergency decision making.



**PUBLICATIONS
AND MAPS**

We publish all of our reports, maps, and data sets and make them available as PDF files or in paper form. There are currently more than 1,100 publications and dozens are added each year.



**GIS DATA AND
DATABASES**

We collect and distribute all of our GIS data, in addition to maintaining several databases of publicly available subsurface and geophysical data.

FREQUENTLY ASKED QUESTIONS

Do I need to understand GIS?

Although Geographic Information System (GIS) experience would be nice, you do not need to be a GIS professional to use the Portal.

What can I use the Portal for?

Interactive maps have two advantages over paper maps—they access the most current information and allow users to manipulate the data.

Can I use the Portal on my mobile device?

Yes! The Portal will now work on tablets and smartphones. For a more streamlined smartphone experience, consider using our simplified mobile app (<http://www.dnr.wa.gov/mobilegeology>).

How can it improve my bottom line?

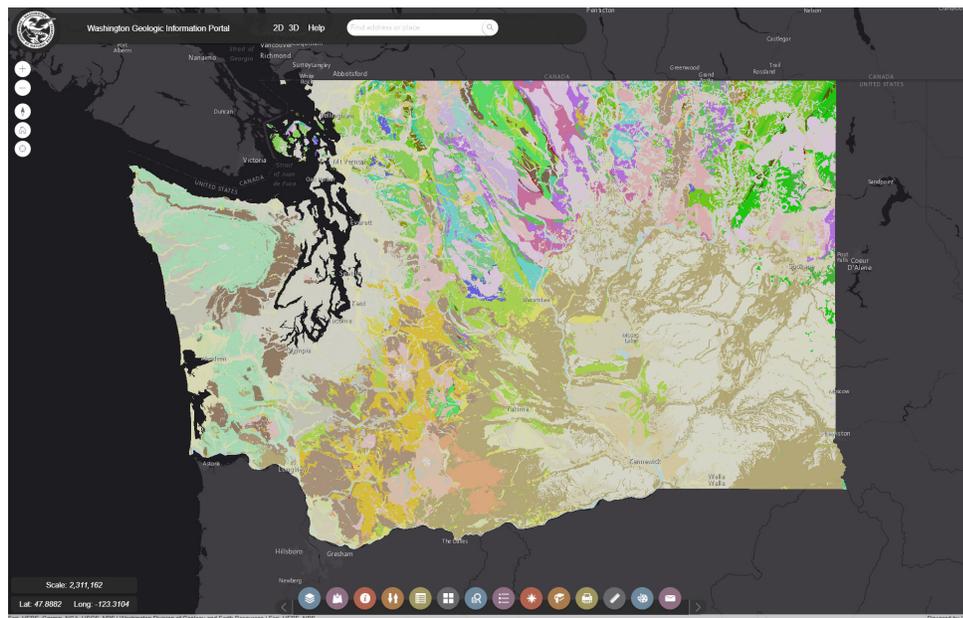
It can improve your efficiency and save you money by enabling you to find the information you need faster and without having to hire outside help. There is a vast amount of data available at your fingertips. What took hours or weeks to find before is now available in minutes.

OUR VISION

Fostering a safer, more productive and resilient society that incorporates geology into its regular thought and decision-making processes



The Washington State Geologic Information Portal



Access the Geologic Information Portal at www.dnr.wa.gov/geologyportal.

What the Portal Can Do

This application puts complex geologic and hazards information into the hands of everyone—citizens and community decision-makers as well as scientists and technical professionals—allowing them to quickly compare and synthesize data of different types (geology, hazards, resources, base maps) to help solve a variety of problems.

- create custom geoscience maps for online display
- find out more about individual map features
- download the corresponding geospatial data
- make informed decisions on issues such as the environment, natural resource protection and exploration, land use, and public safety



WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**
WASHINGTON
GEOLOGICAL SURVEY

LOTS OF DATA:

- Geologic mapping
- Landslides
- Earthquake locations and depths
- Active fault and fold locations
- Liquefaction susceptibility mapping
- Seismic site class and seismic design category mapping
- Geophysical data
- Seismic Scenario Catalog
- Tsunami inundation and evacuation
- Subsurface borehole data
- Geothermal resources
- Active surface mines
- Oil and gas exploration wells
- Base layers, including lidar

FUNCTIONALITY:

- Print your map
- Save your project
- Draw and measure
- Add your own data
- Query the data
- View attribute tables
- Reorder map layers
- Print landslide inventory maps
- Download GIS data
- Filter layers by keyword
- 3D terrain view
- Address search

New and Improved

We've added lots of new functionality and improved many of the tools on the Portal



VIEW LAYER ATTRIBUTES



ADD YOUR OWN DATA



PRINT CUSTOM MAPS



QUERY THE DATA



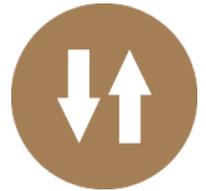
CHANGE BASEMAPS



DRAW AND ANNOTATE



ZOOM TO A LOCATION



REORDER LAYERS



MEASURE FEATURES



IDENTIFY FEATURES



SAVE/SHARE PROJECTS



CONTROL MAP CONTENT

Portal Help

We have created a handy website primer to help with portal navigation and tools.

www.dnr.wa.gov/portal-help

Contact Us

Troubles with using the Portal? Ask via email:

jessica.czajkowski@dnr.wa.gov

Give us feedback through a short survey!

<https://www.surveymonkey.com/r/WGSportal>

GEOLOGY IN THE PUBLIC INTEREST

OUR MISSION

To collect, develop, use, distribute, and preserve geologic information to promote the safety, health, and welfare of the citizens of Washington, protect the environment, and support its economy.

**BYLAWS OF THE
Washington Coastal Marine Advisory Council
Adopted January 14, 2014
Amended March 28, 2018**

I. Purpose

- A. The Washington Coastal Marine Advisory Council (the Council) shall serve as the Governor's advisory body on coastal resource management issues for Washington's Pacific Coast and shall perform such duties as enumerated in RCW 43.143.060.

II. Membership

- A. The Council is established in the Office of the Governor. Voting members of the Council shall be appointed by the Governor or the Governor's designee.
- B. The council consists of the following voting members:
- a) The Governor or the Governor's designee;
 - b) The director or commissioner, or the director's or commissioner's designee, of the following agencies:
 - i. The Department of Ecology;
 - ii. The Department of Natural Resources;
 - iii. The Department of Fish and Wildlife;
 - iv. The State Parks and Recreation Commission;
 - v. The Department of Commerce; and
 - vi. Washington Sea Grant;
 - c) The following members of the Council established by the department of ecology and as existing on January 15, 2013:
 - i. One citizen from a coastal community;
 - ii. Two persons representing coastal commercial fishing;
 - iii. One representative from a coastal conservation group;
 - iv. One representative from a coastal economic development group;
 - v. One representative from an educational institution;
 - vi. Two representatives from energy industries or organizations, one of which must be from the coast;
 - vii. One person representing coastal recreation;
 - viii. One person representing coastal recreational fishing;
 - ix. One person representing coastal shellfish aquaculture;
 - x. One representative from the coastal shipping industry;
 - xi. One representative from a science organization;
 - xii. One representative from the coastal Washington sustainable salmon partnership;
 - xiii. One representative from a coastal port; and
 - xiv. One representative from each outer coast marine resources committee, to be selected by the marine resources committee.

- C. **Terms:** The term of office of each member appointed by the Governor is four years and the chair's term shall be one year, in accordance with RCW 43.143.050.

D. Liaisons: The Council may invite state, tribal, local governments, federal agencies, scientific experts, other states or Canadian provinces, and others with responsibility for the study and management of coastal and ocean resources or regulation of coastal and ocean activities to designate a nonvoting liaison to the council pursuant to RCW 43.143.050 (3). The Council may provide these invitations in a letter as a standing invitation. The Council may delegate the responsibility for sending letters of invitation to specific entities to Council staff (Ecology) or the Governor's representative, as appropriate. Council members may request that the Council invite liaisons to participate in Council meetings.

E. Resignation: If a member, prior to his/her term expiring, is no longer willing or able to serve on the Council, the member will notify the Governor's office and Council staff.

F. Removal: Members may be removed from the Council by the Governor for just cause. Just cause includes, but is not limited to, inability of Council members to regularly attend Council meetings.

G. Reimbursement: Members are not eligible for travel or per diem reimbursement [RCW 43.03.220]. If funding is available, food and refreshments may be provided to maximize time and efficiency of the meeting.

H. Appointment recommendations: If a Council member or the Council as a whole would like to recommend a person who has applied for a seat on the Council for the Governor's consideration, recommendations may be submitted to the Director of the Boards and Commissions office through the Governor's website at:
<http://www.governor.wa.gov/boards/application/recommend.aspx>.

III. Committees:

A. Committees will report to and advise the Council.

i) Steering Committee

- a) The Steering Committee will be comprised of the Chair of the Council, Vice-Chair of the Council, the Governor's representative, and two to four 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.
- b) The neutral convener and Council staff will provide support to the Steering Committee, including scheduling committee meetings.
- c) The duties of the Steering Committee include:
 - 1) Preparing agendas for Council meetings.
 - a. The agenda for each meeting must be developed as a collaborative process by councilmembers, as required by RCW 43.143.050 (4).
 - b. Agenda topics must be consistent with duties of the Council enumerated in RCW 43.143.060. The Steering Committee will also consider whether agenda topics advance the charge from the Governor and the Council's Work Plan.
 - c. The agenda may include input or participation by persons who are not

Commented [SG1]: This amendment will be voted on at the June, 2018, WCMCAC meeting.

Council members.

- d. The Steering Committee will consider member input in preparing agendas for Council meetings. The Chair or neutral convener shall seek input from Council members on meeting agenda topics at every Council meeting. In addition, the Chair, staff or neutral convener will ask members for suggested agenda items one month prior to scheduled meetings.
- e. If a Council member other than the Governor's office is requesting the Council provide a recommendation on a topic, the Council member will
 - 1) request the topic be added to the agenda via the Steering Committee; and
 - 2) provide the Council an overview of the issue at the selected Council meeting.
- 2) Maintaining an annual schedule of topics to be addressed by the Council.
- 3) Developing amendments to the bylaws and other documents related to the operations of the Council.
- 4) Developing recommendation documents for the Council's review and approval in conjunction with other involved committees.

ii) Technical Committee

- a) The duties of the Technical Committee include:
 - 1) Providing recommendations on technical issues as directed by the Council.
 - 2) Providing recommendations on desired deliverables and outcomes on issues before the Council.
- b) Technical Committee recommendations are not formal recommendations of the Council unless adopted by the entire Council in accordance with Section VI of these bylaws.
- c) All Council members may participate in Technical Committee meetings, and participation may vary as topics of interest arise. The neutral convener or staff will communicate the topics and meeting logistics to Council members prior to each meeting.
- d) 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.
- e) At least one Steering Committee member should participate in Technical Committee meetings if possible.
- f) The neutral convener and Council staff will provide support to the Technical Committee, including scheduling committee meetings and supplying meeting materials in a timely manner.
- g) The Technical Committee may solicit input from experts with specific scientific or technical expertise to assist them. However, the Technical Committee must be attentive to state procurement policies and not seek input from someone who, by providing input, will potentially become ineligible to compete for related contracts.

iii) Other Committees

- a) When necessary and as resources allow, the Council, in consultation with the Governor's office, may create additional committees to carry out specific assignments between meetings. Prior to creating a new committee, the Council will identify the purpose of the committee, including how it relates to the Governor's charge and the duties of the council in RCW 43.143.060. The Council will also identify the membership and the duration of

the committee. Committees will report to and advise the Council.

IV. Roles and Responsibilities

A. Council Members: Council members will have the following responsibilities:

- a) Place a high priority on preparing for, attending and actively participating in meetings, including being familiar with and operating within the governing statutes, state and federal laws, and Council bylaws at all times.
 - i. Proxy Voting: If a council member cannot attend a council meeting, the member may designate another voting member of the council as their proxy for voting purposes only. The designation must be transmitted prior to the meeting in writing (e-mail is acceptable) to the Chair, neutral convener, Governor's representative and the proxy designee. The proxy may vote on behalf of the absent member if a majority vote is taken (Section VI(E)(a)(v) of these bylaws). Proxies may not be used for consensus-based decisions, and will not count as part of a quorum. Proxy designations should only be used when absolutely necessary; as noted in sections II and IV of these bylaws, regular attendance and participation in meetings is a primary expectation of Council membership.
 - ii. In the event of unforeseen circumstances, Council members may request to participate in meetings remotely via phone or other technology. This will be accommodated if the meeting space has the appropriate technology available.
 - iii. E-mail communication between and among members is voluntary. It is not assumed or expected that all Council members will read all e-mail communications (or attachments) shared among members; it is expected that all Council members will read materials included with meeting agendas in preparation for Council meetings and committee meetings.
- b) Represent the points of view of their interest area in Council discussions. However, members are also asked to focus on the overall good of the Coast, not just the perspectives of individual interest areas. Additionally, members should notify the Council if there is a potential conflict of interest and recuse themselves from participation in that topic.
- c) Keep constituents informed on what is happening at meetings, solicit input on issues discussed, and share this input with the Council for discussion, even if those opinions differ from the member's own personal views. Be prepared to participate in meetings as necessary to represent the member's specific constituent group position on items contained on the agenda, including developing consensus or voting on issues as listed on the previously circulated agenda.
- d) Work cooperatively with each other, the neutral convener, Council staff, and liaisons to accomplish the purposes of this process and acknowledge that all participants bring with them legitimate purposes, goals, concerns and interests, whether or not they are in agreement with them.
- e) Use discretion to avoid the appearance of speaking for the Council, unless specifically authorized to do so. Council members should not represent matters pertaining to the Council without the consent of the Council as a whole.
- f) Interact in a respectful manner, including respecting the diversity of opinions and refraining from personal attacks either at meetings or away from the meeting in other venues.
- g) Listen to all points of view and perspectives on issues and alternatives and seek to identify areas of agreement as well as reasons for different points of view. Ask genuine questions

- (to learn or clarify) not rhetorical ones (to persuade or argue).
- h) Express concerns and interests clearly. Advocate for your interest while also seeking approaches that build on common ground with differing interests. Do your best to provide thorough yet concise answers to questions, either during meetings or afterwards.
 - i) Focus on the subject at hand, share discussion time, avoid interrupting, respect time constraints, keep reactions and responses from being personal, and avoid side conversations.
 - j) Inform Ecology, the Chair or the neutral convener as far in advance as is possible if unable to attend a scheduled meeting.
 - k) Abide by the discussion ground rules listed in Appendix A.

B. Chair and Vice Chair

- a) 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. If elected, the Chair and Vice Chair shall perform the following functions:
 - 1) The Chair will preside over Council meetings. In the Chair's absence, the Vice Chair will preside.
 - 2) The Chair and Vice Chair shall serve on the Steering Committee.
 - 3) The Chair will serve as the Council's representative on the Washington Marine Resources Advisory Council.
 - 4) The Chair and the Vice Chair will communicate with members between meetings when needed to discuss issues, opportunities, concerns, strategies and alternatives that need to be discussed for meeting the Council's goals and purposes.
 - 5) When appropriate, the Chair and/or the Vice Chair will assist in keeping communication open between the Council, Ecology, Governor's representative, and legislators.
 - 6) The Chair will act as the Council's formal spokesperson. If an alternate spokesperson is needed, the Vice Chair will assume this role if appropriate, otherwise the Council can designate a particular spokesperson for that specific issues as needed. Public statements by the Chair, Vice Chair or designated spokesperson on behalf of the Council should reflect the Council's adopted recommendations and positions. If asked about a matter that the Council has not discussed, then that should be the response.

C. Ecology

- a) Ecology will act as the administrative and primary staff support for the Council in accordance with RCW 43.143.050. In this role, Ecology will:
 - i. Assist the Governor's office, the Steering Committee, and the neutral convener in administrative and operational functions such as meeting materials, meeting logistics, list management, agenda development, etc. Ecology will assist other Council Committees as time allows.
 - ii. Assist in the relay of appropriate information from the Council to various agencies and forums for ocean policy activities.

- iii. Ensure appropriate and relevant information is provided to facilitate Council discussions and tasks, including presentations by subject matter experts, background reports and materials, etc.
- iv. Abide by the discussion ground rules listed in Appendix A.
- v. Absent a neutral convener, work with Governor's office and the WCMAC chair to ensure the roles and responsibilities of the neutral convener are met by either the Governor's office, Ecology, or a substitute facilitator.

D. Liaisons - Liaisons invited to participate under section II D. will be considered non-voting liaisons to the Council and may participate in meetings upon the request of the Council [RCW 43.143.050].

E. Neutral Convener - Consistent with available resources, the Council may approve of hiring a neutral convener to assist in the performance of the Council's duties, including but not limited to the dissemination of information to all parties, facilitating selected tasks as requested by the Council members, and facilitation of setting meeting agendas.

a) The responsibility of the neutral convener is to help keep the Council focused on tasks and may suggest process ideas, strategies, approaches, alternative methods and procedures to promote the work of the Council. The neutral convener will keep discussions moving forward, encourage participation by all members, document decisions and action items, and enforce the Council's ground rules.

b) Specific tasks of the neutral convener may include:

- i. Facilitate meetings of the Council. Maintain a neutral stance in facilitating discussions to achieve the Council's purposes and goals. Ensure that meeting business is conducted in a timely and efficient manner, and that all members have the opportunity to contribute.
- ii. Communicate with members between meetings when needed to discuss issues, opportunities, concerns, strategies and alternatives regarding the Council's goals and purposes.
- iii. Work with the Governor's office, Ecology, and Steering Committee to prepare meeting agendas so that meetings are productive and accomplish the goals of the Council.
- iv. Assist in keeping communication open among members.
- v. Prepare meeting summaries and/or action item lists, and distribute them to members.
- vi. Assure that relevant information is provided to the Council in a timely and effective manner relative to the advice the Council is asked to provide.
- vii. Abide by and enforce the discussion ground rules listed in Appendix A.

F. Observers - Meetings of the Council are open to the public. At each meeting, a brief public comment period will allow observers to offer comments related to issues at hand, subject to time limits stated on the agenda. Public comment will be included on Council agendas at a time prior to Council decisions if practical.

V. Meetings

A. Meetings are held at least twice per year or as needed and will typically be held on Washington's

Pacific Coast. The Governor's office, with input from the Council, will determine the need for and schedule any additional meetings of the Council.

- a) According to the Open Public Meetings Act (RCW 42.30.030), Council meetings will be open to the public. The schedule of regular meetings will be published in the state register per RCW 42.30.075. Meeting times and locations will also be publicized in advance on Ecology's website and standing listserv of interested individuals. Agendas will include time for public comment.
- b) Meeting agendas will be sent to members at least 7 days prior to meetings.
- c) Member communications may be subject to disclosure pursuant to existing state law.
- d) Meetings will begin and end on time and will adhere to the topics on the agenda.
- e) Meetings will be task-oriented with an agenda and materials prepared and distributed in advance, to support informed discussion.
- f) Meeting agendas may be altered at the beginning of the meeting with the consent of the Council, PROVIDED that agenda items seeking formal recommendations may not be added. Formal recommendations must be noted on the agenda distributed prior to the meeting in order to be acted on by the Council.
- g) Members will provide questions or issues for inclusion on the agenda to the Steering Committee. The Steering Committee, working with the neutral convener or staff, will work to incorporate these items as appropriate given the Council's charter, scope of work, and time available. Time will also be set aside at the conclusion of each meeting for members to identify agenda items for consideration by the Steering Committee.
- h) Non-council members are welcome to observe meetings. At the end of the meeting, or as part of an agenda item there will be opportunity for public comment. Public comment will be permitted prior to Council decisions if practical.
- i) The Council may approve of hiring a neutral convener to facilitate and manage Council meetings and perform other functions. [RCW 43.143.050].

B. Quorum. A simple majority (51%) of the Council's voting members is necessary to constitute a quorum. A quorum is necessary for the Council to make decisions or recommendations. If a quorum is not present, the meeting may continue with no actions being taken.

C. Meeting Summaries. A draft written summary of discussion from each meeting will be prepared by the neutral convener and approved by the Council before being considered final.

- a) In the absence of a neutral convener, draft meeting summaries will be prepared by a member of the Department of Ecology in attendance.
- b) The final summary will provide Council members and members of the interested public with a concise and clear summary of the meeting, including overview of each agenda item, discussions and decisions, and reference to related materials. It will not attempt to capture each statement or comment, such as would be found in a meeting transcript.
- c) The meeting summary will report the Council's advice, decisions, action items, assignments from each meeting, and seek to state points of view fairly and clearly—including minority opinions.
- d) Meeting summaries will be sent to Council members via e-mail in a timely manner. Summaries will also be posted on the Council's website and available to the public.

D. Meeting Recordings. Meetings will be recorded if appropriate technology is available. The quality of the recording, particularly in providing a clear recording of voices that are distant from the recorder, is not guaranteed. Meeting breaks are not part of the meeting and will not be recorded, nor included as part of the meeting record. When meetings are officially recorded, the recordings will be maintained by Council staff and made available upon request.

VI. Advice and Recommendations

A. Because the Council is charged with providing recommendations to the Governor, the legislature, and state and local agencies on specific coastal waters resource management issues, it is important that there is a clear and effective process for determining the content of those recommendations, as well as on other Council business. Proposed recommendations shall be provided in writing using an established template that includes background information on the issue and rationale for the recommendation. The Steering Committee will develop a work plan and meeting schedule that allow the Council to provide timely and relevant advice and recommendations to the Governor, legislature, and state and local agencies. The work plan will be adopted by the Council.

B. In making recommendations, the Council shall consider:

- a) The principles and policies articulated in *Washington's Ocean Action Plan* [RCW43.143.060].
- b) The protection and preservation of existing sustainable uses for current and future generations, including economic stakeholders reliant on marine waters to stabilize the vitality of the coastal economy. [RCW 43.143.060]
- c) The charge or other direction from the Governor
- d) Existing state laws and regulations.

C. The Council shall normally operate by consensus pursuant to RCW 43.143.050.

- a) Definition of Consensus: Consensus is a group process where the input of everyone is carefully considered and an outcome is crafted that best meets the needs of the group as a whole. The root of consensus is the word consent, which means to give permission to. When members consent to a decision, they are giving permission to the group to go ahead with the decision. Some members may disagree with all or part of the decision, but based on listening to everyone else's input, all members agree to let the decision go forward because the decision is the best one the entire group can achieve at the current time.
- b) Levels of Consensus:
 - i. I can say an unqualified "yes"!
 - ii. I can accept the decision.
 - iii. I can live with the decision.
 - iv. I do not fully agree with the decision, however, I will not block it and will support it.

D. The Council will attempt to reach consensus with thorough, substantive discussion of the issue, including the presentation of differing perspectives and consideration of various options.

E. Decision-Making

- a) When the Council is making formal recommendations consistent with RCW 43.143.060 or taking other formal actions, a minimum of 12 Council members must support a recommendation.
- b) The following a-formal decision-making process will be used:
 - i. The Chair or the neutral convener will state the proposed recommendation.
 - ii. The note-taker will read back the proposed recommendation.
 - iii. The Chair or the neutral convener will ask Council members to indicate (by a show of hands and/or thumbs up/down/middle) whether they are in consensus (in full agreement; not in full agreement but can “live with” the position of the Council; or cannot live with the position).
 - iv. If consensus has not been reached, efforts will be made to address outstanding concerns.
 - v. After substantive efforts have been unsuccessful in reaching consensus, the Chair or neutral convener may call for a vote, following the same procedures in steps i-ii above.
 - i. The Chair or neutral convener will ask “Who supports this recommendation” and count the hands, followed by “Who opposes this recommendation”, and count the hands. The vote, including the roll call, will be recorded in the meeting summary.
 - ii. If a two-thirds (66%) majority of those voting supports the recommendation, and there is a minimum of 12 affirmative votes as required in a) above, the recommendation will be reported as the position of the Council. In summarizing the decision, the minority concerns will also be reported.
 - vi. All recommendations will be recorded in the meeting summary and added to a formal list of Council recommendations, maintained by the Steering Committee. As provided in RCW 43.143.060, these recorded recommendations will be transmitted, as appropriate, to the Governor, Legislature and other agencies in a timely manner.
- c) Informal decisions that do not result in a formal Council recommendation or constitute a formal action may be made informally and are not required to follow the steps in sub-section a.

F. The Council will not revisit topics upon which it has already held a discussion and made a decision unless there is new information that warrants a new discussion, and the Steering Committee agrees to add it to the agenda.

VII. Communication

A. Representing Council Views. Council members may speak or advocate for themselves or their organization but may not represent the views of the Council unless specifically authorized to do so.

B. Communication Among Council Members.

- a) Meeting materials and other Council information will be provided to Council members by email listserv established for the Council. Council members may contact Council staff (Ecology), the neutral convener or chair to discuss issues or questions that arise between meetings.
- b) Substantive deliberations and development of recommendations amongst members should occur at regular Council or Committee meetings.
- c) Member communications may be subject to public disclosure pursuant to existing state law.

VIII. Funding:

- A. Council's operating funds.** Any recommendation associated with the Council's operating funds shall be submitted to Ecology and the Governor's office. Both are responsible for proposing any state funding requests for the Council's operations through the established state budget process.
- B. Annual Recommendation on Coastal Marine Spatial Planning.** The Council shall establish a standing operating procedure regarding its statutory responsibility regarding providing the Governor and the Legislature recommendations associated with coastal marine spatial planning expenditures and projects, including uses of the marine resources stewardship trust account. (See RCW 43.143.060 and RCW 43.372.070)

IX. Amendments

These bylaws may be adopted and amended at any regular meeting upon a two-thirds vote of the Council, provided that the amendment has been submitted to all Council members in writing two weeks before the meeting.

Appendix A – DISCUSSION GROUND RULES

In order to ensure that the Council's discussions and deliberations are efficient, productive and civil, the Council, Council staff, neutral convener, and liaisons all agree to abide by the following discussion ground rules. The Council grants the neutral convener the permission to remind the Council of these ground rules when needed.

Neutral Convener

The neutral convener is an impartial individual who guides the process and facilitates meetings. The neutral convener's job is to keep the Council focused on the agreed-upon agenda, suggest alternative methods and procedures to move forward when necessary, encourage participation by all Council members, and halt or redirect dialogue that is disrespectful, off-topic, or dominating the conversation so that others are not able to effectively participate. In the absence of a neutral convener, the Chair will assume these responsibilities.

Council Members

Council Members agree to:

1. Be Respectful

- Listen when others are speaking. Do not interrupt and do not participate in side conversations. One person speaks at a time.
- Recognize the legitimacy of the concerns and interests of others, whether or not you agree with them.
- Cooperate with the facilitator to ensure that everyone is given equitable time to state their views. Present your views succinctly and try not to repeat or rephrase what others have already said.
- Silence cell phones and refrain from using laptops during the meeting, except to take notes.

2. Be Constructive

- Participate in the spirit of giving the same priority to solving the problems of others as you do to solving your own problems.
- Share comments that are solution focused. Avoid repeating past discussions.
- Do not engage in personal attacks or make slanderous statements. Do not give ultimatums.
- Ask for clarification if you are uncertain of what another person is saying. Ask questions rather than make assumptions.
- Work towards consensus. Identify areas of common ground and be willing to compromise.
- Minimize the use of jargon and acronyms. Attempt to use language observers and laypersons will understand.

3. Be Productive

- Arrive on time and stay until the meeting is adjourned.
- Adhere to the agenda. Respect time constraints and focus on the topic being discussed.
- Volunteer for tasks between meetings.

4. Bring a Sense of Humor and Have Fun.

Observers

Meetings of the Council are open to the public. At each meeting, a brief public comment period will allow observers to offer comments related to issues at hand, subject to time limits stated on the agenda.

Appendix B—Statutes Governing WCMAC Activities

RCW 43.143.050 - Washington coastal marine advisory council.

(1) The Washington coastal marine advisory council is established in the executive office of the governor to fulfill the duties outlined in RCW [43.143.060](#).

(2)(a) Voting members of the Washington coastal marine advisory council shall be appointed by the governor or the governor's designee. The council consists of the following voting members:

- (i) The governor or the governor's designee;
- (ii) The director or commissioner, or the director's or commissioner's designee, of the following agencies:

- (A) The department of ecology;
- (B) The department of natural resources;
- (C) The department of fish and wildlife;
- (D) The state parks and recreation commission;
- (E) The department of commerce; and
- (F) Washington sea grant;

(iii) The following members of the Washington coastal marine advisory council established by the department of ecology and as existing on January 15, 2013:

- (A) One citizen from a coastal community;
- (B) Two persons representing coastal commercial fishing;
- (C) One representative from a coastal conservation group;
- (D) One representative from a coastal economic development group;
- (E) One representative from an educational institution;
- (F) Two representatives from energy industries or organizations, one of which must be from the coast;
- (G) One person representing coastal recreation;
- (H) One person representing coastal recreational fishing;
- (I) One person representing coastal shellfish aquaculture;
- (J) One representative from the coastal shipping industry;
- (K) One representative from a science organization;
- (L) One representative from the coastal Washington sustainable salmon partnership;
- (M) One representative from a coastal port; and
- (N) One representative from each outer coast marine resources committee, to be selected by the marine resources committee.

(b) The Washington coastal marine advisory council shall adopt bylaws and operating procedures that may be modified from time to time by the council.

(3) The Washington coastal marine advisory council may invite state, tribal, local governments, federal agencies, scientific experts, and others with responsibility for the study and management of coastal and ocean resources or regulation of coastal and ocean activities to designate a liaison to the council to attend council meetings, respond to council requests for technical and policy information, perform collaborative research, and review any draft materials prepared by the council. The council may also invite representatives from other coastal states or Canadian provinces to participate, when appropriate, as nonvoting members.

(4) 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. The agenda for each meeting must be developed as a collaborative process by councilmembers.

(5) The term of office of each member appointed by the governor is four years. Members are eligible for reappointment.

(6) The Washington coastal marine advisory council shall utilize a consensus approach to decision making. The council may put a decision to a vote among councilmembers, in the event that consensus cannot be reached. The council must include in its bylaws guidelines describing how consensus works and when a lack of consensus among councilmembers will trigger a vote.

(7) Consistent with available resources, the Washington coastal marine advisory council may hire a neutral convener to assist in the performance of the council's duties, including but not limited to the dissemination of information to all parties, facilitating selected tasks as requested by the councilmembers, and facilitation of setting meeting agendas.

(8) The department of ecology shall provide administrative and primary staff support for the Washington coastal marine advisory council.

(9) The Washington coastal marine advisory council must meet at least twice each year or as needed.

(10) A majority of the members of the Washington coastal marine advisory council constitutes a quorum for the transaction of business.

[2013 c 318 § 1.]

RCW 43.143.060

Washington coastal marine advisory council — Duties.

(1) The duties of the Washington coastal marine advisory council established in RCW [43.143.050](#) are to:

- (a) Serve as a forum for communication concerning coastal waters issues, including issues related to: Resource management; shellfish aquaculture; marine and coastal hazards; ocean energy; open ocean aquaculture; coastal waters research; education; and other coastal marine-related issues.
- (b) Serve as a point of contact for, and collaborate with, the federal government, regional entities, and other state governments regarding coastal waters issues.

- (c) Provide a forum to discuss coastal waters resource policy, planning, and management issues; provide either recommendations or modifications, or both, of principles, and, when appropriate, mediate disagreements.
- (d) Serve as an interagency resource to respond to issues facing coastal communities and coastal waters resources in a collaborative manner.
- (e) Identify and pursue public and private funding opportunities for the programs and activities of the council and for relevant programs and activities of member entities.
- (f) Provide recommendations to the governor, the legislature, and state and local agencies on specific coastal waters resource management issues, including:
 - i) Annual recommendations regarding coastal marine spatial planning expenditures and projects, including uses of the marine resources stewardship trust account created in RCW [43.372.070](#);
 - ii) Principles and standards required for emerging new coastal uses;
 - iii) Data gaps and opportunities for scientific research addressing coastal waters resource management issues;
 - iv) Implementation of Washington's ocean action plan 2006;
 - v) Development and implementation of coast-wide goals and strategies, including marine spatial planning; and
 - vi) A coastal perspective regarding cross-boundary coastal issues.

(2) In making recommendations under this section, the Washington coastal marine advisory council shall consider:

- (a) The principles and policies articulated in Washington's ocean action plan; and
- (b) The protection and preservation of existing sustainable uses for current and future generations, including economic stakeholders reliant on marine waters to stabilize the vitality of the coastal economy.

[2013 c 318 § 2.]

RCW 43.372.070 - Marine resources stewardship trust account.

- (1) The marine resources stewardship trust account is created in the state treasury. All receipts from income derived from the investment of amounts credited to the account, any grants, gifts, or donations to the state for the purposes of marine management planning, marine spatial planning, data compilation, research, or monitoring, and any appropriations made to the account must be deposited in the account. Moneys in the account may be spent only after appropriation.
- (2) Expenditures from the account may only be used for the purposes of marine management planning, marine spatial planning, research, monitoring, and implementation of the marine management plan.
- (3) Until July 1, 2016, expenditures from the account may only be used for the purposes of:
 - (a) Conducting ecosystem assessment and mapping activities in marine waters consistent with RCW [43.372.040](#)(6) (a) and (c), with a focus on assessment and mapping activities related to marine resource uses and developing potential economic opportunities;
 - (b) Developing a marine management plan for the state's coastal waters as that term is defined in RCW [43.143.020](#); and

(c) Coordination under the west coast governors' agreement on ocean health, entered into on September 18, 2006, and other regional planning efforts consistent with RCW 43.372.030.

(4) Expenditures from the account on projects and activities relating to the state's coastal waters, as defined in RCW 43.143.020, must be made, to the maximum extent possible, consistent with the recommendations of the Washington coastal marine advisory council as provided in RCW 43.143.060. If expenditures relating to coastal waters are made in a manner that differs substantially from the Washington coastal marine advisory council's recommendations, the responsible agency receiving the appropriation shall provide the council and appropriate committees of the legislature with a written explanation.

[2013 c 318 § 3; 2012 c 252 § 4; 2011 c 250 § 2; 2010 c 145 § 10.]

Proposed Steering Committee Membership 2018-2020

Background

According to WCMAC bylaws:

The Steering Committee will be comprised of the Chair of the Council, Vice-Chair of the Council, the Governor's representative, and two to four 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.

At the March meeting, WCMAC elected Garrett Dalan as Chair and Jessica Helsley as Vice Chair of WCMAC.

The Steering Committee recommends the following at-large members for the Steering Committee:

- Chair: Garrett Dalan
- Vice-Chair Jess Helsley
- Governor's Rep: (currently JT Austin)
- At Large Representatives:
 - Dale Beasley
 - Doug Kess
 - Mike Rechner
 - Rod Fleck

Decision

- ! Does WCMAC confirm the at-large members of the Steering Committee?

Draft WCMAC Workplan

6/5/18

Complete	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	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 4 workshops was not received; economic workshop may happen through
B.	Ecosystem Indicators	To provide feedback to the state on refining the list of ecosystem indicators.	C	Informal Advice	6/18-12/18	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	TBD	*Need to consult with NOAA (NWFSC)
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	1/18-12/18	1. Compile Data Gaps (<i>WCMAC Staff</i>) 2. WCMAC Discussion on Initial List of Gaps and Priorities (<i>WCMAC Meeting</i>)	1. List of data gaps (initial list from MSP) 2. Summary of existing, current science needs documents for WA Coast (e.g. OCNMS, PFMC)	TBD	
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>) 2. Develop panel on regulatory roles for Dec. meeting? (<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	
G.	X WCMAC Operations/By-laws Clarifications	To clarify WCMAC operations regarding consensus and majority voting, and process and implications for recusals	B	Operations/Admin	3/18	1. Identify options and/or recommend changes to the by-laws (<i>Steering Committee</i>) 2. Adopt revised by-laws (<i>WCMAC</i>)		No	Completed at 3/28/18 meeting

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

Other Topics of Interest/Future Consideration

Notes/Comments

1	Cosatal Erosion	Coastal Resiliency Work Group is planning a Sciecne-policy workshop on Coastal Erosion
2	Vessel Traffic/Navigational Safety/Transport of hazardous substances	Briefing on Grays Harblor Vessel Traffic Risk Assessment occurred at 3/28/18 meeting.
3	Shipping overview	
4	Oil terminals	
5	Ocean Acidification	Presentation by MRAC members at 6/13/18 meeting
6	Ocean conditions (e.g. temperature, ocean acidification, etc.)	What additional information is desired by WCMAC members?
7	Sea-level rise (included with coastal resiliency?)	
8	Commercial Net Pen Aquaculture	
9	Offshore Aquaculture	
10	Shellfish Aquaculture Management issues (e.g. invasive species, burrowing shrimp, etc.)	Will provide ongoing updates to WCMAC as appropriate
11	Invasive Species Management	Will provide ongoing updates to WCMAC as appropriate
12	Changing Fishing Fleets and Alternative Fishing Methods	
13	Briefing from WDFW on recreation and commercial fishing allocation	
14	Coastal Energy	
15	Economic Development: How to coastal communities adapt to changing economy?	Other coastal groups are considering hosting a workshop