



# MARINE RESOURCES ADVISORY COUNCIL

## **Meeting summary**

June 29, 2021

1 p.m. to 3:30 p.m.

Virtual meeting

## **Meeting attendance and objectives**

The Washington Marine Resources Advisory Council (MRAC) held its 23rd meeting on June 29, 2021 online and by conference call. The meeting was facilitated by Martha Kongsgaard, MRAC Chair, and Angie Thomson, EnviroIssues and Cory Baranski Archer, EnviroIssues.

Members in attendance: Martha Kongsgaard (Chair), Aaron Dufault (Washington Department of Fish and Wildlife), Bill Dewey (Taylor Shellfish Farms), Brian Cochran (WA State Conservation Commission, alternate), Crystal Dinger (Washington Coast Marine Advisory Committee), Cynthia Catton (Department of Natural Resources, alternate), Gus Gates (Surfrider Foundation), Jay Manning (Puget Sound Partnership), Lucas Hart (Northwest Straits Commission, alternate), Representative Joe Fitzgibbon (Washington State House of Representatives)

MRAC members not in attendance: Brian Allison (Puget Sound Commercial Crab Association), Annette Hoffmann (Washington Department of Ecology, alternate), Mike Cassinelli (Recreational Fishing), Mindy Roberts (Washington Environmental Council), Tom Davis (Washington State Farm Bureau), Norm Dicks (Van Ness Feldman LLP), Tony Floor (Northwest Marine Trade Association), Lisa Graumlich (University of Washington College of the Environment), Libby Jewett (National Oceanic and Atmospheric Association), Erica McPhee-Shaw (Western Washington University), Senator Jesse Salomon (Washington State Senate), Marilyn Sheldon (Coastal Shellfish Grower), Douglas Steding (Association of Washington Business), Senator Keith Wagoner (Washington State Senate), Terry Williams (Tulalip Tribes of Washington)

Other participants: Angie Thomson (EnviroIssues, MRAC facilitation team), Betsy Peabody (Puget Sound Restoration Fund), Candace Penn (Squaxin Island Tribe), Cory Baranski Archer (EnviroIssues, MRAC facilitation team), Ebony Welborn (Sea Potential), Garrett Dalan (The Nature Conservancy), Jan Newton (Washington Ocean Acidification Center), Jennifer Hennessey (Office of the Governor), Jessie Turner (OA Alliance), John Elder (Washington State Senate), Julia Sanders (Global Ocean Health), Kelly Ferron (Washington Department of Ecology), Micah Horwith (Washington Department of Ecology), Paul Williams (Suquamish Tribe), Peter Murchie (Environmental Protection Agency), Sulley Schuster (EnviroIssues), Tommy Moore (Northwest Indian Fisheries Commission), Terrie Klinger (Washington Ocean Acidification Center),

Meeting objectives:

- Share updates on recent ocean acidification efforts.
- Hear an update on the 2021-2023 biennium budget.
- Learn about key takeaways from the recent MRAC interviews and discuss future areas of focus for MRAC.

### **Welcome and introductions**

Martha Kongsgaard, MRAC Chair, opened the meeting and thanked everyone for making time to participate.

### **Recent ocean acidification happenings**

Participants shared out on recent progress and updates. Highlights include:

- Betsy Peabody, Puget Sound Restoration Fund, shared an update on upcoming kelp forest actions included in the Blue Ribbon Panel Report, made possible through recent funding by the legislature, including:
  - Supporting implementation of the Puget Sound Kelp Forest Recovery Plan.
  - Hosting a kelp expedition July 15-23 to showcase the importance of kelp forests both culturally and ecologically.
  - Working with PBS on a Changing Seas episode over the next several years.
  - Exploring plant-based strategies to alleviate ocean acidification including recycling seaweed from intertidal shellfish farms and recycling it upstream in the watershed.
- Lucas Hart, Northwest Straits Commission, gave an update on current efforts to solicit funding for inter-agency coordination involving kelp and an ongoing kelp policy project aimed at examining what regulations and policy already exist to serve kelp.
- Terrie Klinger and Jan Newton, Washington Ocean Acidification Center (WOAC), noted recent publications, ongoing studies, and research updates.
- Paul Williams, Suquamish Tribe, gave an update on science education funding, including a request from the Office of the Superintendent of Public Instruction for online resources related to environmental issues in the Puget Sound.
- Peter Murchie, EPA, provided an update on President Biden's FY22 budget proposal, which includes a 1.2 billion dollar increase in the EPA's budget in climate and equity work.
- Micah Horwith, WA Department of Ecology, gave an update on recent Ecology activities, including:
  - Marine monitoring network is back up and running after losing sampling from April to October 2020 due to the pandemic.
  - Glass pH sensor will be retired and will be replaced with discreet water sampling techniques.
  - Upcoming publication of the Coastal Management Journal compiled by the Pacific Coast Collaborative Hypoxia Working Group. Will include contribution

from Ecology about the lessons learned from implementing ocean acidification monitoring within a state framework.

- Cinde Donoghue, Department of Natural Resources, shared several updates on recent DNR activities, including:
  - Receipt of a grant from the EPA's National Estuaries Program to develop a K-12 climate change program using near-shore monitoring sites to get students out into the field. DNR has been collaborating with the University of Washington's College of Education and College of the Environment, the state's Superintendent of Education, and over 50 teachers across Washington to develop the curriculum.
  - Attending upcoming kelp expedition (see Betsy's update) with UW lab to share science examining tissue samples from kelp and eelgrass to identify genetic traits that are resistant to climate change stressors.
  - Planning outplant of oysters in eelgrass, kelp, and bare sediment to compare growth rate and shell strength.
- Gus Gates, Surfrider Foundation, gave an update on recent advocacy efforts, including:
  - A bill to prohibit seabed mining in Washington marine waters.
  - A bill to ban Styrofoam and other plastic products and implement improved standards for recycling, making utensils, and straw use in classrooms.
- Julia Sanders, Global Ocean Health, shared updates on recent relevant legislation that has passed in Washington, including a major cap and trade investment program using borrowed language from the 2018 initiative effort with specific commitments to increasing ability to address ocean acidification, increase carbon stores and storage in forested wetlands, grazing lands, freshwater/brackish lands, and freshwater riparian areas.
- Cynthia Catton, Department of Natural Resources (DNR), gave an update on recent work, including a project and associated publication reporting out on large-scale monitoring of kelp and sea grass throughout the Puget Sound.
- Jessie Turner, OA Alliance, shared general updates on recent activities, including:
  - Publication in the Coastal Management Journal featuring an overview of the 2019 workshop that brought together different states to strategize how to lay the foundation for ocean acidification policy action and management.
  - Participation in event on World Oceans Day with representatives from the Makah Tribe.
  - Planning for events during Climate Week (September), COP26 (November).

### **Budget Update**

Jennifer Hennessey, Office of the Governor, shared a budget update for the 2021-2023 biennium:

- In general, ocean acidification investments made over the last several years are sustained, including funding for the facilitation of MRAC.

- Technically, this group is scheduled to sunset next June, so there is a need to develop a legislative strategy for the next session to amend the language and extend the sunset date.
- Representative Fitzgibbon noted that it will be important to begin thinking about strategy soon, including how this work fits into the climate work that will be happening in 2022.

**Discussion – visioning the future of MRAC**

In Spring 2021, the MRAC facilitation team had one-on-one conversations with 24 MRAC members and long-time participants to explore the following questions:

- Where do you see that MRAC contributes value to work on ocean acidification?
- Do we currently have the right people around the table? What voices are we missing?
- Are there things you wish MRAC was doing or topics we were addressing that we are not currently?
- What does a future look like where MRAC is no longer necessary for there to be continued focus on ocean acidification? What works needs to be done to reach that future?
- What is the timeline for completing that work? How does that align with a June 2022 sunset date for the council?

Angie Thomson, EnviroIssues, reported out on the key themes from the interviews, including:

<p><b>Where do you see that MRAC contributes value to work on ocean acidification?</b></p> <ul style="list-style-type: none"> <li>• Leads coordination, communication, education, translation of ocean acidification work.</li> <li>• Distills information from scientists to be accessible to others; makes data available in real-time to industry and regulators.</li> <li>• Brings scientists, agencies, NGOs, tribes, etc. together in an inclusive way.</li> <li>• Connects legislators with scientists for data and funding needs.</li> <li>• Provides a valuable networking opportunity.</li> <li>• Provides a concentrated focus on ocean acidification, within the overall climate story.</li> </ul>
<p><b>Do we currently have the right people around the table? What voices are we missing?</b></p> <ul style="list-style-type: none"> <li>• Translators/information sharers.</li> <li>• Those directly impacted by ocean acidification (commercial crabbing/fishing).</li> <li>• Tribes.</li> <li>• Agriculture.</li> <li>• UW Climate Impacts Group.</li> <li>• Key player successors.</li> <li>• Educators.</li> <li>• Federal policy-makers.</li> <li>• New legislation representation (Natural Resources); key legislators</li> </ul>

**Are there things you wish MRAC was doing or topics we were addressing that we are not currently?**

- Work to address ocean acidification at multiple scales, including thinking about multiple stressors (temperature, hypoxia, etc.)
- Explore opportunities to have a greater impact within the climate arena, without losing the concentrated ocean-focus.
- Consider ocean climate priorities at the same time as atmospheric and terrestrial climate priorities.
- Create additional investment in solutions, building on knowledge we've gained.
- Be a voice to guide meaningful actions in adaptation and remediation.
- Ensure strong connection between resource managers and decision-makers and scientists so science can inform policy and management – create a feedback loop.

Most MRAC members and long-time participants agreed it is not time for MRAC to sunset as a stand-alone council. The group validated the conclusion to pursue an extension for the MRAC sunset date or, if possible, eliminate the end date altogether. Martha Kongsgaard will lead a small committee to discuss next steps for the extension.

The group further discussed ideas for expanding the groups who participate in MRAC, how MRAC might engage in broader climate conversations, and possibilities for strengthening the action focus of the group. Highlights from the discussion include:

- Paul Williams noted the high degree of overlap between translators/information sharers and educators and that teachers can be a valuable resource for educating students, families and friends on the impacts of ocean acidification. Paul also flagged the importance of sharing information with communities such as people of color, youth, and impacted communities.
  - Betsy Peabody agreed with the degree of overlap and added the note that MRAC is a hub, and there's a need for the hub to expand. More people who are part of the impacted communities should participate, then communicate outward.
- Several participants shared ideas and contact information for groups and individuals to reach out to. The MRAC facilitation team will follow up.
- Julia Sanders suggested inviting commercial fishermen to attend MRAC meetings as guest presenters, giving an opportunity for them to both share what they are observing and listen to highlights from ocean acidification work. This may create more interest in further participation.
- Jessie Turner contributed that a partnership with NGOs like the Seattle Aquarium or Port of Seattle could be helpful for sharing information out to various audiences.
- Micah Horwith noted that carbon pollution is a root cause of ocean acidification. There is an opportunity for MRAC to walk forward with those efforts, engaging with new climate policies.

- Betsy Peabody suggested auditing the Blue Ribbon Panel report and 2017 Addendum to identify actions that have both ocean acidification and carbon benefits to help merge ocean acidification and climate objectives.
- Terrie Klinger noted there are two stressors clearly associated with ocean acidification and the biological response to ocean acidification: hypoxia/deoxygenation and temperature. Hypoxia often co-occurs with low pH (ocean acidification conditions), and changes in climate are increasing deoxygenation. Temperature is tied to ocean acidification in that increased temperature increases the stress that organisms feel in response to ocean acidification conditions.
  - Jan Newton added that the stressors are often overlapping. Climate change can also change circulation in the ocean, which contributes to ocean acidification and rising temperatures. Harmful algal blooms can also be added to the list of multiple stressors.
- Martha Kongsgaard and Jennifer Hennessey acknowledged the focus of MRAC on “knowledge to action” and the need for a solid base in monitoring and investigation to guide action. Reducing carbon dioxide was the number one goal from the Blue Ribbon Panel, and there is a need to ramp up engagement in the carbon dioxide reduction conversation.
- Jessie Turner explained the need to increase climate action because of impacts to marine resources, and the power in talking about the linkages. MRAC is well-poised to share guidance on what governments can be doing now to help make meaningful next steps and local interventions.
- Peter Murchie suggested MRAC can both act as a translator of ocean acidification science to policymakers and play a role in influencing science priorities and budgeting at the state and federal level. Increased federal funding for climate issues over the next few years is an opportunity for MRAC to highlight ocean acidification science and the connection with climate science.
- Paul Williams noted the government funding for research is a multi-year process in the current model, but business research and development ventures can receive funding immediately. There may be value in looking at creative solutions for how we fund and direct some research efforts.
  - Terri Klinger added it is still essential to maintain and fund long-term monitoring efforts, but agreed it is valuable to have more agile funding sources for innovative research.
- Betsy Peabody posed the question of how to link nutrient reduction strategies with ocean acidification actions. There is a need to think about how we engage in the nutrient reduction conversation.
  - Betsy also noted the need to circle back and revisit topics when we’ve learned new information. For example, kelp efforts were initially intended to connect

carbon dioxide reduction and ocean acidification, but it turned out kelp was affecting multiple other factors. With that information, it is important to consider kelp science in a broader context.

- Paul Williams noted there needs to be an understanding of what other groups are doing in their ocean acidification work to avoid duplicative efforts and augment the successful work of others.
- Terrie Klinger mentioned it is not enough to collect information for the sake of collecting information. Helping to inform policy is an action on its own and an important piece of MRAC's role. There should be a continued focus on action around policy.
  - Cynthia Catton added it is also important to consider what policy science is intended to inform.
- Jennifer Hennessey reminded the group of the resource managers survey completed last year. The results of the survey will soon be published, and the next step will be to look at the results and convene managers around key decision points to identify the information they need and where there are current gaps.
  - Jessie Turner added this survey and following conversations will also be relevant to multi-stressors.
- Jan Newton suggested a reconnection with partners in other states that are engaged in the same type of programs, knowing efforts are increasing in other parts of the country. Oregon legislature recently approved some research funding.

### **Next steps**

Next steps include convening smaller work groups to further explore membership, science to policy, and science to action. The next MRAC meeting will be another virtual meeting or hybrid approach in late 2021.