

WASHINGTON COASTAL MARINE ADVISORY COUNCIL MEETING

Wednesday, February 14, 2024
 Part 1 from 9:30am – 12:00pm
 Part 2 from 1:00pm – 3:00pm

[TVW's Broadcast Channel](#)

[Link to Materials](#)

[Public Comment Sign-up](#)

Zoom link: <https://us02web.zoom.us/j/83292887466?pwd=TWc4dktEU0F4Wi9HSGVzcVliSDIvZz09>

Meeting ID: 832 9288 7466

Passcode: 021424

Call in number: 1-253-205-0468

February 14th, 2024 Agenda

| Time | Agenda Item and Description | Objective | Presenter(s) |
|--------------------|---|--|--|
| 9:30* (25 min) | Welcome and Introductions, Agenda Review <ul style="list-style-type: none"> Acknowledge recording of WCMAC meeting Welcome from Chair Review agenda Welcome and roll call introductions Meeting ground rules Encourage public comments via chat Adopt summary of December meeting minutes | Information, Action <i>Reference Materials:</i> <ul style="list-style-type: none"> February 2024 Agenda Draft December 2023 Meeting Summary (Appendix A) | <ul style="list-style-type: none"> Rod Fleck, Chair Nicole Gutierrez, Facilitator |
| 9:55* (20 min) | WCMAC Updates <ul style="list-style-type: none"> Membership updates Announcements <ul style="list-style-type: none"> ECY Letters of Support Work plan topic elevation Public Comment Protocol | Information, Discussion | <ul style="list-style-type: none"> Nicole Gutierrez, Facilitator Mai Aoki, Ecology |
| 10:15* (30 min) | Updates <ul style="list-style-type: none"> Governor's Office Updates MRC Updates Agency Updates General Coastal Updates Technical Committee Updates MRAC Update | Information, Discussion <ul style="list-style-type: none"> Technical Committee Meeting Summaries (Appendix B) | <ul style="list-style-type: none"> Nicole Gutierrez, Facilitator Carrie Sessions, Governor's Office Other State Agency representatives Technical Committee Co-leads WCMAC members |

| Time | Agenda Item and Description | Objective | Presenter(s) |
|--------------------|--|--------------------------------|--|
| 10:45* (15 min) | Willapa-Grays Harbor Estuary Collaborative Update | Information, Discussion | <ul style="list-style-type: none"> Nicole Naar, WA Sea Grant |
| 11:00* (15 min) | Data Gap Prioritization Update | Information | <ul style="list-style-type: none"> Mai Aoki, Ecology |
| 11:15* (20 min) | Marine Resources Advisory Council: mCDR Update & Work Planning | Information, Discussion | <ul style="list-style-type: none"> Angie Thomson, MRAC Facilitator Cory Archer, MRAC Facilitator |
| 11:35* (15 min) | Public Comment <ul style="list-style-type: none"> Link to sign up for public comment. Encourage commenters to limit their comments to no more than 3-minutes to allow for all public comments to be received. | Discussion | <ul style="list-style-type: none"> Public/Observers Nicole Gutierrez, Facilitator |
| 11:50* | 1-hour break Reconvene at 12:50pm using the same Zoom link | | |
| 12:50* (25 min) | Olympic Coast National Marine Sanctuary <ul style="list-style-type: none"> Ocean Acidification Sentinel Site (OASeS) | Information, Discussion | <ul style="list-style-type: none"> Katie Wrubel, NOAA |
| 1:15* (20 min) | BOEM Updates <ul style="list-style-type: none"> Discussion | Information, Discussion | <ul style="list-style-type: none"> Juan Carlos Gomez, BOEM |
| 1:35* (45 min) | Developing a Framework on a Planning and Evaluation Process for OSW Projects <ul style="list-style-type: none"> Governor's Office and Contractor Update Discussion | Information, Discussion | <ul style="list-style-type: none"> Carrie Sessions, Governor's Office Gridworks |
| 2:20* (25 min) | WCMAC work plan & Accomplishments review <ul style="list-style-type: none"> 2023 WCMAC Accomplishments 2024 – 2025 work plan | Information, Discussion | <ul style="list-style-type: none"> Nicole Gutierrez, Facilitator Alle Brown-Law, Facilitator |
| 2:45* (15 min) | Public Comment <ul style="list-style-type: none"> Link to sign up for public comment. Encourage commenters to limit their comments to no more than 3-minutes to allow for all public comments to be received. | Discussion | <ul style="list-style-type: none"> Public/Observers Nicole Gutierrez, Facilitator |
| 3:00* | Adjourn and Next Steps | | <ul style="list-style-type: none"> Nicole Gutierrez, Facilitator |

Meeting Ground Rules

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.



Appendix A. December 2023 Meeting Summary

Please see meeting summary on next page.

Washington Coastal Marine Advisory Council Meeting

Draft Summary

Wednesday, December 6, 2023

Part 1 from 9:00am – 11:45am

Part 2 from 12:45pm – 3:00pm

Meeting materials and presentations can be found on the WCMAC website:

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

Meeting recording can be viewed here: <https://twv.org/video/washington-coastal-marine-advisory-council-2023121031/>

Highlights

- Welcomed new member, Katie Arkema, who represents a Science Institution
- Staff and consultants from the Department of Commerce and Evolved Energy presented about the WA State Energy Strategy, particularly highlighting how offshore wind is evaluated in the Strategy.
- Ecology shared an update about three current funding proposals for projects on the WA coast, as well as information about the Integrated Pest Management Workgroup’s efforts on burrowing shrimp.
- Trident Winds shared the results of their study on the economic impacts of offshore wind to WA State.

Summary of Decisions

- WCMAC approved the September meeting minutes with minor revisions.
- WCMAC voted and approved Rod Fleck as the 2024 Chair and Mike Nordin as Vice Chair.
- WCMAC approved letters of support for the three Ecology-led proposals.

Upcoming Meetings

- Next WCMAC Meeting: **February 14, 2024, 9:30 am – 3 pm**
- Next OSW Technical Committee Meeting: **January 23, 2024, 1 – 3 pm**

WCMAC Members Present

| | |
|--|--|
| Arkema, Katie – Science Organization | Niles, Corey – Department of Fish & Wildlife |
| Conrad, Michele – Economic Development | Nordin, Michael – Pacific MRC |
| Culbertson, Paula – Wahkiakum MRC | Polagye, Brian – Energy Organization |

| | |
|--|--|
| Dalan, Garrett – Grays Harbor MRC | Rechner, Michael – DNR |
| Doenges, Richard – Department of Ecology | Sessions, Carrie – Governor’s Office |
| Fleck, Rod – North Pacific MRC | Steelquist, Peter – Coastal Recreation |
| Meinig, Christian – Coastal Energy | Thevik, Larry – Commercial Fishing |

Council Members Absent

| | |
|---|---|
| Berger, Joshua – Department of Commerce | Zimmerman, Mara – WA Coastal Sustainable Salmon Partnership |
| Dolsak, Nives – Educational institution | |

Others Present (as noted on the Zoom log-in)

| | |
|---|--|
| Anderson, Phil | Moore, Tommy –NW Indian Fisheries Commission |
| Aoki, Mai – Ecology | Nevitt, Kristine – Interested Citizen |
| Beasley, Dale | Nightingale, David – Department of Ecology |
| Blake, Brian – Ocean Gold Seafood | Okoniewski, Mike – West Coast Pelagic Conservation Group |
| Blalock, Jackson – Pacific Conservation District | Roberts, Melanie – PNNL |
| Bowman, Stephanie – Commerce | Sheldon, Brian |
| Chambers, Susan | Shigaya, Cami – HDR Consulting, work with Hecate Energy |
| Davis, Shannon | Shumacker, Joe |
| Decker, Kevin | Skelton, Ann – Pacific County MRC |
| Dennehy, Casey – Ecology | Watson, Jessica – ODFW |
| Grunbaum, Arthur “R.D.” | Weinstein, Alla – Trident Winds |
| Hall, Heather – WDFW | Wright, Teri – Wild Orca |
| Hardy, Rebecca – Cherry Point Aquatic Reserve Committee | Xu, Sarah |
| Hargreaves, Jeremy – Evolved Energy | Zimmerman, Olivia – Ecology |
| Kelly, Delia | Brown-Law, Alle – Cascadia Consulting Group |
| Krienitz, Jay – Ecology | Chang, Mike – Cascadia Consulting Group |
| Lewis, Randy – Port of Grays Harbor | Gutierrez, Nicole – Cascadia Consulting Group |

Welcome and Introductions

- Rod Fleck, WCMAC Chair, opened the meeting and welcomed WCMAC members. Rod noted that the meeting was being recorded and broadcast live by TVW, before covering the WCMAC ground rules.
- Mike Chang reviewed the agenda for the December WCMAC meeting and detailed the ground rules.
- Katie Arkema was introduced as a new WCMAC member. Katie is a Senior Earth Scientist at PNNL and will be occupying the seat for Scientific Institutions. She researches relationships between natural systems and human systems.
- Mike Chang led roll call.
- September Meeting Minutes:
 - Larry Thevik commented that he appreciated the recognition of the edits he had sent and requested confirmation his edits were integrated.
 - Mike Chang then reviewed the edits Larry requested.
 - Larry asked for an edit in the reference to the National Marine Fisheries Service quote he shared. Larry would like to add the reference number to <https://www.regulations.gov/comment/BOEM-2022-0009-0178>.
 - Larry Thevik made a motion to approve the September Meeting Minutes, Chris Meinig seconded.
 - All members gave thumbs up, and approved meeting minutes.

WCMAC Updates

Membership Updates

- Carrie Sessions welcomed Katie Arkema to WCMAC.
- Carrie Sessions shared that in the September WCMAC Meeting, she informed the Council that the Governor's Office would be updating membership and asked those on WCMAC with expiring membership to reapply by 10/15/2023. The Governor's Office reviewed several applications for new appointments and re-appointments to WCMAC and carefully reviewed all applications and based reappointment on two factors: 1) the duration of time that the person had served on the Council, and 2) the attendance and active participation of the applicant in discussion—seeing how they represented their community and organization on the WCMAC. It's important to the Governor's Office that these vacant seats are filled with qualified individuals. The Office welcomes nominations for any of these seats and hopes to have some of them filled by the next WCMAC meeting.

WCMAC Discussion

- Mike Nordin asked which of the WCMAC seats were made vacant. [The Governor's Office Board and Commission website for WCMAC](#) was shared.
- Larry Thevik replied that two of WCMAC's longstanding members were dismissed. He noted that there is a letter submitted by Brian Sheldon that should be shared with the

Council, and he requested that it be included in the minutes. Larry shared serious concerns about the process that resulted in their absence, and the other empty seats. He shared disappointment in the dismissal of WCMAC members and stated that he believes WCMAC will suffer because of their vacancies. He understands that the Governor is at liberty to adjust the membership of WCMAC. Larry requested more information on why these vacancies occurred.

- Carrie thanked Larry for his comment. She shared that the Governor's Office factually disagrees with some statements in Brian Sheldon's letter. The Governor's Office deeply values the expertise members have brought to WCMAC, and they are extremely grateful to all members who have served and contributed over the years. The Governor's Office values having a diversity of perspectives represented on the WCMAC and strives to ensure all the Governor's boards and commissions are accessible to Washingtonians, which means they must ensure the turnover of seats and limit consecutive terms. Carrie's predecessor began this process, and they had a lot of difficulty finding new members for those seats, as people weren't willing to apply when the seat was filled. They decided the only way to ensure people apply was to make those seats available.
- Mike Nordin shared that he was disturbed by these updates, as many members who were removed helped establish WCMAC. He commented that he believes it will be difficult to find qualified people to fill those vacancies. Mike reminded the Council that one of the goals for WCMAC was to be a representative body for the coast, however, most members do not live on the coast. He expressed that he feels the body is being guided in a certain direction through these decisions.
 - Carrie thanked Mike for sharing his opinion, and welcomed any suggestions for those who might fill the vacant seats.
- Rod Fleck extended a thank you to those leaving the WCMAC—Dale, Mike C., R.D., Randy, Charles, and Brian S.—all who have provided a rich legacy of information, advocacy, and strong respect for the coast and the processes of WCMAC. Rod wanted to ensure that their service was recognized and noted that the system needs people who serve with vigor, which these folks achieved.
- Rich Doenges shared that as someone who does not live on the coast but does a lot of work on regulations and actions that affect the coast, he has learned so much from these former WCMAC members. He shared that even if they aren't present as members of WCMAC, he will continue to hear their voices. He mentioned that there are robust public comment opportunities during WCMAC meetings where former members can comment, and that change is inevitable and part of the evolution of WCMAC is new representation.
- Mike Nordin commented that he is unsure who will represent the shellfish industry that lives on the coast, as he doesn't know anyone willing to step up for that position. He also asked if a Governor could override an RCW.
 - Carrie answered that they have statutory authority to make governor appointees in line with the Governor's discretion.
- Larry Thevik made a comment in the chat asking about his request to include Brian Sheldon's letter in the minute summary.

- Mike C. replied that they would include reference to the letter in the meeting summary and can include a link if provided but are unable to include the actual letter itself.

WCMAC Updates

- Casey Dennehy shared an update on Doug Kess, a former WCMAC member and original chair to the WCMAC. Doug is currently experiencing some health issues. Casey has started a WCMAC kudo board to show him that he's in everyone's thoughts and Nicole will circulate the link via email.
- Mike Nordin asked in the chat, does OPMA require an in-person option?
 - Carrie Sessions replied that any questions about OPMA should be sent to the Facilitation team and Ecology, and they will review and provide answers.
 - Mike Nordin commented that the Governor has said once the pandemic/emergency mode was over, we were required to follow the OPMA procedures. For the MRCs, they have been required to return to hybrid meetings now.

Chair/Vice Chair Election

- Mike Chang reviewed the roles of Chair and Vice Chair (as outlined in the WCMAC Bylaws), as well as voting procedures.

Chair Election

- Rod Fleck provided his statement, thanking everyone for the nomination and noting that he's very willing to serve if elected. Rod has worked as public attorney and planner for the City of Forks for 29 years, has worked on many economic issues on the coast, and considers himself a strong advocate for rural communities in WA. The goal of the chair is to be fair and open and ensure meetings follow statutory authority, while promoting goals of our coastal communities. He will continue to build upon the work of previous WCMAC Chairs and strengthen the WCMAC's advisory role.
- Mike Rechner made a motion that Rod Fleck be approved as WCMAC Chair for 2024.
 - Paula Culbertson seconded.
 - No members opposed the motion.
 - Motion passed.

Vice Chair Election

- Mike Nordin presented his statement, sharing that he has been involved in WCMAC since its beginning, and has been a resident of the coast since 1991. The coast is very important to him, and as Vice Chair he promises to represent the entire coast and be mindful of the coast. He believes it's important to have leadership that has been involved and engaged in these issues, and he promises to do that.
- Peter Steelquist thanked everyone for the nomination and presented his statement. Peter is the WA Policy Manager for the Surfrider Foundation, and lives in Port Angeles, WA. He is a lifelong Washingtonian, and cares deeply for passing on our coastal community so that his children have a thriving community to call home. Creating healthy and

resilient coastal communities is his life goal. Before working for the Surfrider Foundation, Peter spent eight years working for the WA legislature, which has shown him the importance of committees such as the WCMAC and their ability to guide change. As other states navigate managing their coastal issues, WA sets an example by having a regular forum for coastal stakeholders to advise on these issues. If elected Vice Chair, Peter will help WCMAC navigate the choppy waters ahead, and help elevate the WCMAC to policymakers and communities. By working together and continuing to build trust, we can keep WA as the best place in the world to call home. He thanks everyone again for the nomination.

- Mike Rechner made a motion to hold a vote, Rich Doenges seconded.
- Roll Call Vote: Mike N. won with 7 votes versus 6 for Peter. Voting record in [Appendix A](#).

Updates

Governor's Office Update

- Carrie Sessions shared that they are at the beginning of the Legislative Session and are preparing the Governor's Budget, which they are required to submit by December 22.
- Carrie Sessions provided an OSW update, noting that in September she had previewed that the Governor's Office was acting on two separate items.
 - First, they have issued an RFP to hire a consultant to help conduct outreach and engagement with coastal community stakeholders and federally recognized Tribes to help establish a planning and engagement process for potential OSW development off the WA Coast that ensures we engage folks in a meaningful way. Proposals are due December 11, and they hope to have the consultant begin work in January.
 - Second is the supply chain initiative, in which the State is looking to better support OSW development across the US by building component parts to OSW and exporting them.

MRC Updates

- Paula Culbertson shared that the Wahkiakum MRC is currently revising how they approve grant requests. She noted that they are looking to codify everything so that it's all captured, however, it is time consuming.
- Mike Nordin shared that his MRC is working to update their bylaws. They are also discussing how meeting membership will work, as they're trying to recreate the way their board membership is made up. They have several speakers coming to present at their upcoming meetings, mostly on OSW. They're still working with WDFW to get funding. A resolution passed at WA Association of Conservation District, trying to move MRCs into the WA State Conservation Commission and out of WDFW, to add more ease.
- Garrett Dalan shared an update on the MRC Summit, noting that it was successful, and had strong attendance with over 50 people. The Summit looked at erosion and hazard mitigation work, fisheries, marketing and micro/macro-economics, and green crab.

Garrett noted the Summit partners were Sea Grant, WDFW, and the Makah Tribe. He expressed gratitude to those who helped and contributed.

- Rod Fleck shared that the North Pacific MRC hosted a presentation from the WA State Geological Survey on Tsunami Walk Maps. He noted that the presentation was a sobering discussion but a powerful tool. He hopes that we can incorporate that tool into future WCMAC discussion. In previous years, the North Pacific MRC has hosted a film festival, which they are trying to renew, with Ian Miller. There are a lot of amazing films about our coast, and it would be great to showcase these. In between these events they hosted a maritime heritage festival, with the Quinault Indian Nation.

Agency Updates

- Mike Rechner reported no updates from the Department of Natural Resources. They have a few budget requests that are part of existing programs, but nothing new.
- Rich Doenges reported that there are no specific updates from Ecology. Casey Dennehy is back from parental leave, and he thanked Mai Aoki for filling in while Casey was away.
- Corey Niles reported no updates from WDFW.

General Coastal Updates

- Mike Nordin reported erosion updates on North Cove, also known as Washaway Beach, noting they are still combatting various erosion issues, including the need for a tool to protect against burrowing shrimp. The burrowing shrimp are harming both the water quality and shellfish industry in the area. Since July, they have caught over 80,000 green crab to remove the invasive species however more work is needed to improve the situation. They are seeking more federal assistance and funding to combat this issue.
- Michele Conrad presented on the WA Coastal Community Roadmap, which Oceanbeat Consulting completed in October. The roadmap brought representatives together to examine how climate change may be affecting coastal communities now and into the future. The roadmap explores how we can strengthen their resilience in light of climate change. They're helping the Dungeness crab fishery get funding for electronic modeling, as well as the Oregon fishery. This work would track the presence of tagged whales and sea turtles in the area, seeing how that area overlaps with the Dungeness crab fishery, to hopefully reduce encounters between whales and fisheries.
 - Link to WA Coastal Community Resilience roadmap:
https://oceanbeatconsulting.com/wp-content/uploads/2023/11/WA_Community_Roadmap_final.pdf

Technical Committee Updates

- Nicole Gutierrez shared that in the November OSW Technical Committee meeting, Mike O. and Larry Thevik provided an update on the Oregon draft Wind Energy Area comment period and relevant letters that had been submitted to BOEM. The TC is working on their Action Plan for Objective 2, as they began the review process at the last TC meeting. The TC is working to stay apprised regarding floating OSW off the coast of WA, and will resume meetings in January 2024, and continue to track emerging topics.

- Larry Thevik commented that he would refer other WCMAC members to the TC meeting summaries, and that links to those discussions be sent to the full WCMAC. Larry also expressed concern about the TC co-lead role in the absence of Dale Beasley. He re-emphasized that the TC is continuing to develop an Action Plan, to help service the Principles of Engagement that were endorsed by the WCMAC. He shared that Principle #3 states that BOEM, State agencies, and others must engage with key stakeholders, fishing industries, and coastal community members to publicly inform and vet the data used in decision making, and continues to say “WCMAC strongly recommends that a cumulative impact analysis be initiated and completed before leasing to comprehensively evaluate these potential impacts to the region and the California Current Marine Ecosystem.” The purpose of the TC aligns with the Principles of Engagement, and we need to continue to try and keep them aligned. In the last TC meeting, they continued to review progress and processes in other states, namely OR, and the input of tribal sovereigns and PFMC, who recommended holding off on further leasing decision until more research on cumulative and ecosystem effects are better understood. There is currently no BOEM process in WA, and there is much to be learned from the processes in CA and OR. He then closed with two quotes from the letters he referred to:
 - PFMC: “In our opinion, the pause has been insufficient to allow the robust evaluation that the Council has requested. In the Letter we offered detailed comments and recommendations to be considered prior to issuing final WEAs off the coast of OR.”
 - Protect US Fishermen (led by Heather Mann): “We ask you to please send a message to BOEM that while OSW may play a role in Oregon’s transition to meet clean energy goals, the current process has been inadequate and is not in the best interest of coastal communities and the State of Oregon to move forward with at this time.”
- Nicole noted that all the OSW Technical Committee meeting summaries are included in the Agenda Packets for each quarterly WCMAC meetings.

MRAC Update

- Rod Fleck reported that he is trying to integrate the MRAC discussion more with our meetings. He shared that we will hear from the speaker that the MRAC had for the next WCMAC meeting.

Integrated Pest Management Workgroup Update

- Rich Doenges shared an update on the Integrated Pest Management Workgroup (IPM WG). The IPM WG was formed in 2019 between the Willapa-Grays Harbor Oyster Growers Association and Ecology. The WG has not yet identified a pest management solution, but they have several leads that show promise and warrant more investigation. WA State ranks first in all states for sales in aquaculture products with sales totaling over \$200 million/year, and shellfish aquaculture is an incredibly important and significant resource. A major issue for growers is burrowing shrimp (ghost shrimp and mud shrimp). When they reach certain populations in the sediments, it makes the sediment too soft and unable to support shellfish aquaculture, so oyster beds are lost to effective shellfish cultivation.

- The IPM WG has received nearly \$4 million from the WA Legislature, through the WA Dept. of Agriculture, to fund research efforts since 2020. In the current 2023-2025 biennium, the WG has \$2 million for this work, and the change to two-year funding from fiscal year cycle funding has been tremendously helpful.
- The WG identified three projects for this funding cycle:
 1. Invasive Species Corporation, where they are screening microorganisms that may help at controlling burrowing shrimp.
 2. The Pacific Shellfish Initiative is helping to look at optimization for floating arrays for alternative oyster aquaculture.
 3. The UW is testing the impacts of mechanical control for burrowing shrimp. Different methods have been tried before with little success, but this method will use vibration and is showing some promise.
- There was a second RFP issued by WSDA, and they will be scoring those projects in December and hope to have those awards out in the new year. They hope that some of those proposals they've funded will be successful as part of an integrated pest management and maximize the number of tools that shellfish growers can use.

Questions and Comments from WCMAC

- Mike Nordin expressed disappointment that one of WCMAC's former members, Brian Sheldon, wasn't able to provide a lot of input in this discussion due to membership changes.
- Paula Culbertson asked if there was any specific information for why clove oil has potential.
 - Rich replied that it seems to be effective in killing juvenile shrimp—the new recruits that get settled on the tide flats—but not for the larger shrimp that burrow much further down in the sediments. The advantage of the clove oil, if you combine some of the mechanical controls that kill adults, is that it can prevent juvenile shrimp from infesting the beds.
 - Paula asked if they know the reason behind this. For example, from either chemical make-up or heat.
 - Rich replied that he was unsure if research has identified the specific mechanism, however, it's not heat. The mechanical controls work by crushing the burrows that have been formed, and therefore cutting off supply to oxygenated water.
- Larry Thevik echoed what Mike Nordin said, noting this conversation would benefit from Brian Sheldon's expertise.
- Paula Culbertson asked if Brian Sheldon could come to WCMAC as an expert.
 - The facilitation team replied that Brian is welcome to be invited as an expert to present to the WCMAC or could provide public comment during the period.
- Rich noted that in terms of recruiting a new person for the shellfish aquaculture seat, it's important to have that coastal resource and industry represented in WCMAC. He will ask people at the IPM WG to apply.

Public Comment #1

- Brian Sheldon shared that after hearing the reasons for his removal from WCMAC, he felt compelled to send a letter, which he also put in the public comment form. He also requested that Carrie Sessions produce the documentation about his attendance and expertise on the fishing industry. He serves on multiple advisory boards, and after speaking with many growers, no one is willing to serve on WCMAC. He stated that WCMAC needs someone who has the background. Adding to Rich's statement, it's an interesting approach to develop a natural microbe that could possibly push the shrimp out or form some kind of control. The floating array lacks popularity because it doesn't have the balance that's necessary. The shrimp have exploded into new areas that previously were not infested. Compaction has been ruled out by growers, as it destroys the shellfish bed and eelgrass, and clove oil has not yet been funded. Mike Nordin had old data, the actual green crab data is 120,000 this year alone, and there's been one shellfish grower that has been catching them.
- Dale Beasley presented a question, asking about liaisons to the WCMAC Technical Committees. Given his time invested in WCMAC and the OSW TC, he offered to be a liaison to the OSW TC, if possible.
 - Mike C. replied that they'll need to check with the OSW committee, but yes, they can bring technical experts into those meetings.
 - Dale replied that he had no further constructive comments at this time.

WA State Energy Future

Presentation recording 2:15:20 – 2:51:45. See slide decks in the December 2023 WCMAC Meeting Packet.

WA State Energy Strategy, Nora Hawkins

- Nora Hawkins, representing the Energy Division for the Department of Commerce, presented on the WA State Energy Strategy. She began with Energy data basics, noting the transportation sector as the largest energy use sector in WA State. She presented the 2021 State Energy Strategy and electrification scenario which explores the implications of different electrification scenarios, while looking to achieve a carbon-neutral electric grid by 2030, and fully decarbonized grid by 2050.
- What are the new resources needed to provide for the increased electricity usage? Onshore and Offshore wind is projected to provide a sizable amount of electricity to the NW, picking up in 2040, however, both onshore and offshore wind will comprise a much smaller portion of WA electrification.

Jeremy Hargreaves, Evolved Energy

- Jeremy Hargreaves, from Evolved Energy Research, provided an overview on the work being done since the development of the State Energy strategy. Studies have included researching what Oregon would need in a net-zero scenario, and they found it would require 20 GW of OSW, in line with WA State Energy Strategy. He presented on the Net Zero Northwest's (NZNW) Study, which was designed to answer key questions for stakeholders, in how to best achieve decarbonization and meet future energy goals. The

models seek to identify least cost models across the spectrum of energy infrastructure needs.

- Jeremy outlined key differences between the NZNW study and other studies and the major themes that the study considered. These included:
- Jeremy provided details on key themes and outcomes from the study, these included:
 - Energy efficiency, clean electricity, electrification, clean fuels, and carbon sequestration.
 - Siting and permitting provide the largest uncertainty that will influence the energy map in the future.
 - How the IRA is accelerating adoption of clean energy technologies. Washington's emissions targets have accelerated the development of clean fuels industry, and WA's targets are driving the largest clean fuel market development in the world – we're currently seeing the early stages of hydrogen development and electrolysis expansion. The question then becomes – how much can we rely on imported clean fuel from other states?
 - Key OSW findings in the NZNW study show that California's OSW mandate of 25GW by 2045 displaces economic OSW development in the Northwest. This mandate limits the market for additional OSW development and reduces the need for imported energy into CA. WA is better for interconnection, but the OSW resource is worse than CA.
- Jeremy concluded by noting there will be more studies early next year on the economic benefits of developing OSW off the coast of OR.

WCMAC Discussion

- Mike Nordin presented a few questions:
 - The models list "other energy demands," could you provide examples?
 - This seems like there's an assumption that there will be OSW energy, even off the coast of WA.
 - Nora replied that in the State Energy Strategy, we were looking for the modeling to show what is the least cost resources, and not putting any policy preferences into those scenarios. The modeling was intended to show what the implication of different resources and what would be the least cost resources that were identified under different scenarios.
 - I saw the term "renewable natural gas." I wasn't aware that natural gas was renewable.
 - Nora answered that there are opportunities to utilize natural gas that would otherwise be emitted into the atmosphere. You can use that natural gas in pipelines to heat homes and then assume that the emissions are being offset because that natural gas would otherwise be emitted into the atmosphere. It's a bit of a confusing term, but it's a way to have reduced emission natural gas usage.
 - On carbon sequestration – what kind of strategy are you using for the carbon sequestration, or what's the idea there?

- Do these models consider the mass population migrations from the Midwest into Montana, Idaho, and Washington?
 - Jeremy answered that they have not considered population migration, however they underpin the study with the EIA (annual energy outlook) and put all assumptions about how population and industrial production will change. They do see population increases in the NW, and those are accounted for.
- On the federal end, it showed that nuclear was being discussed. I was curious about what the strategy for Washington could be. There are a lot of good micro-nuclear strategies that have come up.
 - Jeremy answered that we are looking at what are the least cost resource opportunities, which becomes challenging in certain circumstances where resources are more likely to be dictated by feasibility constraints rather than economics. There are a lot of challenges in siting those technologies. What we've assumed in our studies is a publicly available forecast for where small modular reactors might go in the future. We have about 1 GW of small nuclear reactors being built in the 2030s. It seems like feasibility and pace would be dictating that. Nuclear energy is being developed in other states, direct air capture and concentrating direct air capture. We think there are questions about whether we get a competitive cost for direct air capture. In our latest study, we didn't allow for that, and the result is we distribute direct carbon capture.
- There's a lot of emphasis on energy use and decreasing energy use, however, there's little effort in retrofitting houses in being sustainable on their own, and/or a new law requiring all homes to be more self-sufficient. This should be highlighted as a potential solution.
 - Nora answered that WA and the NW region are very committed to energy efficiency, and we've been successful in these opportunities. Utility companies all have programs to help with energy efficiency.
 - Rooftop solar tends to be more expensive for residential systems compared to utility scale (3x more), so implementing utility-scale solar is an option. There is a need for both types of resources.
 - One challenge for WA is that the largest load centers (most houses) are in areas where insulation is lower, but central WA has more solar capacity.
 - They looked at deployment of battery systems in homes, and additional flexibility in vehicle to grid charging systems. All of these things are part of the NZNW Study.
- Larry Thevik shared that in the presentation, they mention the transmission infrastructure along WA coast as a possibility for transmitting OSW to the interior of WA. It's his understanding that OR has about 2-3 GW of transmission infrastructure in place now, and WA doesn't match this. He commented that there isn't an argument that OSW is necessary for decarbonization goals. Given that transportation is the highest carbon using activity, it seems that changing that transportation demand is the key for reaching decarbonization goals. He also wondered about hydroelectric energy, and if it could be

increased, and then potentially lowering the demand for electricity in the state. If that's so, that seems to counter the claims by many project advocates of the urgent need to have more electricity available to meet the increasing demand in WA.

- Jeremy replied that the 30% reduction is a reduction in all energy uses across the economy, which is attained through large increases in the amount of electricity used. In end uses, AC and vehicles contribute to a doubling of electricity use. Factoring in fuels leads to about 150% increases, so a total of 250% increase in electricity needs. Larry's point on transportation is correct, as that's an area for a lot of efficiency gains. In terms of transmission for OSW, Larry is probably correct in terms of the availability right now. What Jeremy is discussing is interconnecting around 20GW of OSW, at large nodes where you could connect current nodes into, built out closer to the coast.
- Nora commented that hydropower capacity is already being fully utilized in WA state, and with climate change the availability of hydrogeneration is diminished.
- Jeremy commented that WA is an exporter of hydropower, but that system will not expand into the future, and the growth of electricity use will outpace hydroelectric capacity. In future scenarios, WA becomes a net importer of energy because of that reason. Most of the wind and solar resources are lower quality than in other places, but it's all about economic tradeoffs.
- Larry replied saying he thought that the hydroelectric capacity of WA lessened the likelihood of OSW in WA?
- Jeremy stated that they're finding OSW to be a high-capacity factory and high quality resource and can complement onshore options, because it produces outputs when onshore options are not. However, at some point there are diminishing returns.
- Paula Culbertson asked if they have factored in any of the necessary server farms and production for AI, as well as the amount of electricity it takes to produce that.
 - Jeremy answered that the existing ones and planned ones are factored in, but the growth for server farms for new AI technology is very uncertain. There are favorable energy prices and climate for siting server farms in Oregon and Washington, but there are other places in the nation that are also favorable (like the Wind Belt), so it's difficult to forecast where those new loads are going to go.

BIL and CZM Funding Proposals from Ecology

- Olivia Zimmerman from Ecology shared that Ecology was invited to submit three full applications for the proposals she highlighted at the September WCMAC meeting. She shared that Ecology is requesting a WCMAC letter of support for all three projects.
- The first project is the Owl Creek Restoration Project, led by Trout Unlimited, and they're requesting \$1.3 million. Legacy timber harvesting has resulted in the loss of woody debris, so the project aims to restore a mile of creek by placing large wood pieces, riparian planting, and invasive species removal. This project can easily be expanded at no additional cost and will result in increased salmon populations and climate resilience by restoring channel morphology.

- The second is a project in Padilla Bay, looking at model sediment transport and hydrodynamics, in which they are seeking \$500,000 for their work.
- Third is the NOAA Climate Resilience Challenge, the goal being to support a portfolio of regional projects, and they're requested \$75 million, the max for this proposal. They are hoping to focus on three coastal sub-regions, North Puget Sound, north Olympic Peninsula, and the Pacific Coast. They hope to eventually create a statewide partnership with a holistic approach to climate hazards. Ecology is viewing this project as an opportunity to boost climate resilience throughout the state by emphasizing capacity building and community power-building.

Three Consensus Votes

1. Motion to approve a WCMAC letter of support for the Owl Creek Restoration?
 - a. Rich Doenges made a motion to approve, Peter Steelquist seconded.
 - b. Majority approves.
 - c. No opposition from WCMAC members.
2. Motion to approve a letter of support for Padilla Bay?
 - a. Peter Steelquist made a motion to approve, Chris Meinig seconded.
 - b. Majority approved.
 - c. No opposition from WCMAC members.
3. Motion to approve a letter a support for NOAA Regional Challenge?
 - a. Mike Nordin abstained due to his involvement in this project.
 - b. Paula Culbertson made a motion to approve, Mike Rechner seconded.
 - c. Majority approved.
 - d. No opposition from WCMAC members.

Trident Winds Update

Presentation recording 3:34:00 – 3:54:02. See slide deck in the December 2023 WCMAC Meeting Packet.

- Alla Weinstein, Trident Winds, provided an update on a recent study of OSW in WA State. She noted that Nora and Jeremy provided a great overview in their presentation, and the following update will build on that. She noted that something not discussed in Jeremy's presentation is the limited space available for OSW in WA. There are a lot of constraints, as OSW requires certain depths which conflict with shipping and DOD. We are limited to roughly 560 square miles for any OSW development, until technology allows us to expand into deeper waters.
- After assessing energy demands and resources, Trident Winds submitted an unsolicited lease request for 2-3 GW off WA coast in 2022. Trident Winds hired a consultant (E3) to determine the system value of OSW using the least cost capacity expansion model. The results demonstrate that WA needs to include OSW in its energy mix to meet the energy and climate goals at least cost. Seven GW of SW would save ratepayers closer to \$5 billion. While Oregon wind is stronger, it's in the very southern part of the state and doesn't match the profile needed for WA. The resource and demand profiles must match.
- Alla shared that the study showed that WA State OSW is best to serve WA electrical load in winter months, as it matches the demand profile better. Comparing WA strategies to

meet the states clean energy goal, specifically scenarios with and without OSW, using OSW off WA coast can help reduce system costs to WA ratepayers. This is seen by looking at the amount of transmission cost for OSW off the coast of WA versus utilizing out of state energy production.

- Alla concluded her update by sharing that WA can do the consultation and engagement process differently and can establish an interagency taskforce to engage with BOEM.

Questions and Comments from WCMAC

- Mike Nordin noted that E3 did the market study, and asked if Alla could define the market.
 - Alla replied that the market in question is WA State, and the state's energy and climate goals.
 - Mike Nordin shared that with the OSW production of energy, he doesn't see how local communities will benefit from having electrical rates drop if low rates already exist.
 - Alla replied that there is no way to isolate the community and that results must be statewide. While they did an economic benefit study for communities on the coast, this study specifically looks at benefits to the WA state grid.
 - Mike replied that he's been struggling to find any benefit for the coast and asked about the associated cost of a dead Pacific County Community. He also shared that he felt his community would bear all costs for OSW, without perceived benefits.
 - Alla replied that this study did not investigate that, and only focused on benefits to the electrical system.
- Corey Niles asked where the differences in the Commerce study and the Trident Winds study come from, and who decides to move forward or not move forward with OSW?
 - Alla replied that WA does not have an Energy office, the Dept. of Commerce regulates energy and public utilities, and the Utilities and Transportation Commission regulates consumer-owned utilities. Currently, these efforts aren't really coordinated, and the state needs to decide, and pull together integrated research plans.
- Larry Thevik shared that there's a lot of information in this study, and more time should be dedicated to it. He appreciated Alla's perspective on the 20GW goal, being that it's unlikely given siting constraints off the coast of WA. There's no analysis of any of the potential negative impacts to the marine ecosystem and the coastal communities. There are approximately 560 sq. miles where OSW could be sited; does that include the PAC-PARs and/or the National Marine Fisheries Service recommendation not to have development within 136 fathoms? Also, would the proposed 349 miles of OSW generate 2GW of plate capacity or output capacity? It seems it would generate 6GW per square mile?
 - Alla replied that there are parts of the unsolicited lease request that are not usable, but you can place substations. Study does not include PACPARs but does include NOAA Fisheries.

WCMAC Year in Review and 2024 Work Planning

- Due to time constraints during the meeting, the Facilitation team will circulate the 2023 Accomplishments document via email for WCMAC feedback as well as starting to plan our 2024 Workplan. The Workplan allows us to track the work that WCMAC is doing and address emerging information.

Public Comment #2

- Mike Okoniewski shared his surprise over the lack of discussion surrounding impacts, noting that ecosystem impacts are a big area of concern for fishermen. He also pointed to the lack of empirical data related to ecosystem impacts of OSW. The CA current is one of the most productive ecosystems in the world, including land ecosystems, which adds a different element to the conversation. The impacts go beyond ecosystem, including socioeconomic as well.
- Teri Wright commented that they make a similar comment at every WCMAC meeting, but the group needs to ensure that any OSW considerations do not harm other species. They pointed to the Southern Resident Orcas which feed off Grays Harbor, and the need to safeguard the species when building renewable energy and industry. There are also recent reviews the Chinook salmon, and perhaps placing them on the endangered species list.
- Randy Lewis shared that he feels WCMAC has accomplished a lot, and that there are a lot of important issues on the table and the best accomplishments by WCMAC came from collaboration between people with extremely different viewpoints or opinions. An example that came to mind was that resiliency was focused on all physical issues, and Rod brought up the connection to economic viability on the coast, and the resiliency in communities on the coast. It's important to find common ground that accomplishes these things.
- Dale Beasley had a question for Alla and asked if she knew of any projected cost per kw for the consumer.
 - Alla replied that DOE has a program called OSW Shot, the target of that program would be to reach \$45 by 2035, however this is aspirational. The current projections that we use for WA are closer to \$60 MW/hr., or \$0.06/GW/hr. due to the strong maritime industry.

Closing and Adjourn

- Mike C. thanked everyone for a focused and productive meeting. WCMAC will continue discussing OSW in the next meeting. Mike wished everyone a happy holiday season and a wonderful celebration for the New Year!

Appendix A: Vice Chair Vote

| Name | Seat | Mike Nordin | Peter Steelquist | Abstain | Absent |
|------------------|---------------------------|-------------|------------------|---------|--------|
| Vacant | Citizen | | | | |
| Vacant | Commercial Fishing | | | | |
| Larry Thevik | Commercial Fishing | X | | | |
| Vacant | Conservation | | | | |
| Michele Conrad | Economic Development | X | | | |
| Nives Dolsak | Education | | | | X |
| Chris Meinig | Energy | | X | | |
| Brian Polagye | Energy | | X | | |
| Peter Steelquist | Recreation | | X | | |
| Vacant | Recreational Fishing | | | | |
| Vacant | Shellfish Aquaculture | | | | |
| Vacant | Shipping | | | | |
| Katie Arkema | Science | | X | | |
| Mara Zimmerman | Coast Salmon Partnership | | | | X |
| Vacant | Port | | | | |
| Garrett Dalan | Grays Harbor MRC | X | | | |
| Rod Fleck | North Pacific MRC | X | | | |
| Mike Nordin | Pacific MRC | X | | | |
| Paula Culbertson | Wahkiakum MRC | X | | | |
| Vacant | Washington Sea Grant | | | | |
| Rich Doenges | Dept of Ecology | X | | | |
| Corey Niles | Dept of Fish & Wildlife | | X | | |
| Carrie Sessions | Governor's Office | | | X | |
| Mike Rechner | Dept of Natural Resources | | X | | |
| Joshua Berger | Dept of Commerce | | | | X |
| Jay Carmony | WA State Parks | | | | X |



Appendix B. Technical Committee Meeting Summaries

Please see final meeting summaries on the next page.

WASHINGTON COASTAL MARINE ADVISORY COUNCIL

Offshore Wind (OSW) Technical Committee

October 17, 2023

1pm – 3pm

Meeting Highlights

- The Committee reviewed the Objective 2 Action Plan and determined it is not ready to be shared with the full WCMAC at the December meeting.
- In breakout groups, the Committee brainstormed ideas and questions for the proposed Governor’s Office offshore wind study and the WA State Energy Strategy.

Participants

WCMAC & TC Members

- Larry Thevik, Commercial Fishing (TC Co-Chair)
- Dale Beasley, Commercial Fishing (TC Co-Chair)
- Brian Polagye, Energy representative
- Corey Niles, WDFW
- Arthur “RD” Grunbaum, Coastal Conservation group
- Rich Doenges, Department of Ecology
- Nives Dolsak, UW
- Matt Niles, State Parks

TC Members & Facilitators

- Ann Skelton, Pacific County MRC
- Mike Okoniewski, Pacific Seafood Consultants
- Brandii O’Reagan, WA Sea Grant
- Mai Aoki, Ecology
- Jay Krienitz, ECY
- Nicole Gutierrez, Cascadia Consulting
- Alle Brown-Law, Cascadia Consulting

Meeting Summary

Welcome and Agenda Overview

Nicole welcomed everyone to the OSW TC meeting and reviewed the agenda and ground rules.

- Dale commented that he would like to discuss the offshore use maps, and how he’d like them to be updated, such as including the US Coast Guard fairways. He noted the importance of these maps for newer members.

- Dale also requested that the TC discuss the cost of OSW in an upcoming meeting. He added that multiple developer groups have withdrawn their proposals on the East Coast and are asking for significantly more money than original purchase agreements had outlined.
- Nicole replied to Dale's comments that these action items are both highlighted in the Objective 2 Action Plan which will be covered in the latter half of the meeting.
- Nives commented that some TC members have inquired about current research on coastal communities and offshore wind and she shared that OSU/ Pacific Marine Energy Center recently received a \$2.5 million grant to study how communities in CA and OR view OSW development. A [brief writeup can be found here](#).

Updates and Announcements

August Meeting Summary & OSW TC Shared Folder

Nicole shared that she sent the final August meeting summary via email and the Facilitation Team is currently working to upload the summary to the shared folder.

- Larry commented that he appreciated the answer to Dale's questions, and seconded the need to dive deeper into those topics.
 - Larry shared that he endorses the final August summary, and notes that it was sent late to receive review.
 - Larry raised concerns regarding the shared folder, noting that there weren't any meeting summaries in there and it was challenging to navigate. He had thought the folder would be a 'documents library,' or a depository for information that could be shared easily with the members of WCMAC, the technical committee, and the public. He also raised the following questions:
 - How do we find the page without a prompting link?
 - What do I do to get there?
 - How do we submit data to the documents library?
 - How does the public access the documents library?
 - Where is the link to the library in the action plan itself?
 - Nicole replied to Larry's questions and comments; the facilitation team can create a "How-To" document that answers those questions. Nicole will respond to them as a follow-up, but briefly, the facilitation team and Ecology staff had determined that the folder would be an OSW TC shared folder and not a public access folder because it will have draft items waiting for revision/ feedback. There is an option to make some folders public and others private, which we can explore. In regard to adding materials to the document library, TC members may suggest things to the group and provide those items to the facilitation team for upload.
 - Larry replied that he wasn't sure who determined that access to the documents library would be limited/ private. To his understanding the folder would act as a library of information for WCMAC members at large, the OSW TC, and the public to stay informed on

what may happen of our coast rather than a folder for the OSW TC only.

- Nives shared that UW did not receive the grant she applied for, but OSU received \$2.5M to research how coastal communities feel about offshore wind.
 - Brian Polagye shared that UW is also involved in that study and that Shana Hirsch is UW's lead.
 - Nives will reach out to Shana to determine if there's any WA work being included in the study.
 - Brian replied that to his understanding it mostly includes OR and CA because OSW work is further along there.
- Dale supported Larry's comments about the documents library, and would appreciate a streamlined access process.
- **Next Step:** The Facilitation team will streamline the shared folder to ensure easier access.

Vote on Meeting Scheduling:

- The majority of OSW TC members shared that they would prefer option 2 of more frequent and shorter meetings (2 hour-long monthly meetings, except during months with full WCMAC meetings). Many shared that they would like the flexibility to extend or adjust time depending on agenda needs.
- Some members shared that they would like the ability to call a meeting outside of previously scheduled meeting times if the need is there.
- For a full list of votes by members, see [Appendix A](#).

OSW TC Updates

Data Gap Prioritization Update

Mai provided an update on Ecology's data gap prioritization process, sharing that they have been interviewing subject matter experts from state and federal agencies, academic institutions, and organizations. They are currently refining the list of data gaps. They are also conducting tribal outreach. Mai shared that the list of data gaps evolves as they speak with each expert, and that she is considering reaching out again to experts they spoke with early on, to get feedback on data gaps that have been added later in the process.

- Mai provided an example of the data gap prioritization for marine birds. They had originally identified general data gaps, related to OSW and offshore aquaculture. They then edited the list based on conversations with experts. At the moment, the top two data gaps are: general status, abundance, distribution, and trends, plus collision with OSW.
- **Next Steps:** Mai will continue interviews for all categories. She is currently seeking experts in socioeconomics and culture and refining the list of data gaps.

Technical Committee member questions on Ecology's data gap prioritization update:

- Brian shared that he understands why collision is near the top of risks but is curious how to verify the risk of collision without improved monitoring methods, as these are difficult to adapt.
 - Mai replied that monitoring methods are ranked lower because they came up in later interviews, which is why she wants to reach out to early experts

again. Those who ranked items higher are currently involved in the field resulting in bias towards certain risks. Ultimately, rankings are determined by the number of experts placing risks at specific rankings. Mai commented that she will follow up with Brian.

- Mike O. commented that in regard to migratory paths, there's a lot of general use of the word migratory, and that on the other hand there are juveniles that move offshore. Mike would also like to see migratory paths, phytoplankton, and foraging on the list, and asked Mai to share the PowerPoint with the TC.
 - Mai replied that foraging is included, however phytoplankton is not included, as it is indirectly addressed through foraging and affected behavior.
 - Mike commented that essential fish habitat includes the idea of food and spawning, and is surprised that a major food source for the pyramid is left out.
- Larry commented that there may be some treaty tribes missing from the list of tribes on Mai's list.
 - Mai replied that the tribes mentioned are ones she has started conversations with. She has reached out to all coastal treaty tribes and is still waiting to hear back from some.
- Larry shared that he felt surprised over the lack of reference to protected avian species, and that he sees a big gap in this data. He noted that he is unsure what "accepted levels of change" looks like for an ESA-listed and protected species such as the short-tailed albatross. He shared that interaction with this species was stated as a continued "conservation concern" in commercial fishing management and that concern was reiterated and passed to the Pacific Fisheries Management Council in 2019. Those interactions should be a continued and crossover concern when it comes to potential blade collisions of ESA listed avian species with OSW developments. He also echoed the forage question previously from Mike O.
 - Mai replied that the data gaps apply to all birds, including protected species.
- Corey commented that the OSU research grant felt narrow, and it could be beneficial if Nives helped the TC better understand what it would take to tackle some of these questions. What resources are needed? How much research can be done, and how much do these things really cost? Corey shared that he would be interested in learning more about the \$2.5M OSU project to help us think through what resources would be needed for WA.
- Rich asked if Mai would contact Shoalwater Tribe as well.
 - Mai replied that she reached out to the Shoalwater Bay Indian Tribe and is waiting to receive a response.

Sea Grant Update

Brandii provided a Sea Grant update, sharing that there has been a request for Sea Grant to help gather the public comments and questions that have arisen during BOEM engagement processes in CA and OR. She shared that collating those items into a database is a larger effort than Sea Grant has capacity for, but she is looking for grants

that may provide funding. They are reaching out to CA and OR to find out if they're already completed this type of work, and if they'd be willing to share with the group.

WCMAC Meeting Topics

Alle provided an overview of the WCMAC meeting topics that have been flagged for follow up. TC members were split into two breakout groups to brainstorm questions and prompts related to how the Governor's Office is evaluating a strategy that would include hiring a contractor to perform a several-month study recommending an OSW Washington specific planning and engagement process *and* the WA State Energy Strategy. The following sections summarize the discussion and questions members developed during the breakout rooms.

Governor's Office Proposal

- Looking at existing public venues for evaluating initiatives such as the Parks Commission, how does any initiative to get public feedback dovetail with those existing forums?
- When the Governor's Office makes contact with BOEM, they need to ensure that both the public and fishing interests are being considered. For example, in Coos Bay, without public opinion being shared it's difficult to discern how coastal communities feel about OSW development.
- Need to place existing state marine planning and permitting processes side by side to clearly outline which tools are at our disposal, and which to draw on in multiple use situations.
- Tribal engagement is key to this process at both federal and local level.
- Considering Ecology's role of support for engagement to the WCMAC committee and providing locally-based technical information, what is the regulatory capacity, and what work may ECY staff do for that?
- Who are the stakeholders? How does BOEM's process look different from an alternative OSW process?
- Seems as though there won't be any OSW development in WA unless WA were to ask for it, if that's the case, how do we ensure a process unlike OR?
 - Would like more than 3 meetings with BOEM, unlike in OR.
- Would like to build off WCMAC rules of engagement.
- Review identified engagement requirement process in MSP, fisheries, stakeholder group, and other engagement built into MSP.
- How would the consultant process integrate with WCMAC?
 - Tons of information in federal comments.
 - Library of information that they should start with, NGOs and fisheries.
 - Consultant would benefit from WDFW and WCMAC experience.
- Would want to see the State and BOEM outreach process aligned.
- What needs to go into state coordination agreement?

WA State Energy Strategy

- WCMAC OSW members would need a brief on what the plan/strategy covers.
- How does OSW fit with the state's net zero goals and clean energy strategy?
- What are the economics of the strategy, including ratepayers?

- The energy strategy outlines affordable renewable energy to WA coast. It highlights no petroleum energy, what does that look like for the coast? How are the different strategies accounting for climate change? What are the hydroelectric power streamflow implications?
- What data is missing?
- How often is the strategy updated?
- At what point did the strategy begin considering onshore wind and onshore solar, and when did those become part of the power grid?
- What is the political feasibility and community support for the strategy, and was that considered? Or did they only consider load and grid capacity?
 - How did that feature into writing the strategy?
- In Southern OR, they were looking into putting transmission capacity near Grays Harbor, how does this initiative interact with the state energy capacity? The regional energy strategy seems to be eating up WA capacity.
 - The energy strategy is considering transmission on a regional scale.
 - They envision new large capacity interconnects being built between Washington and Montana/Wyoming, yet there's not a lot of historical precedence to have that going well. Does not necessarily attribute cost and feasibility of overcoming likely public opposition.
 - How to reconcile the amount of large capacity transmission required under the energy strategy with the states inability to build large scale transmission projects in past years?
 - Baseline scenario: doesn't add significant generation capacity in WA, all significant load growth is almost entirely served by wind and solar from Wyoming and Montana.

Objective 2 Action Plan

Nicole described the Objective 2 Action Plan background, including the four priority themes for near-term actions, and noted that we are looking to identify the 2024-2025 priorities. She noted that this Action Plan is intended to provide direction for the Technical Committee and allows WCMAC to remain flexible as new information is available or new needs arise.

Technical Committee Discussion:

- Corey shared that the Governor's Office has decided to move forward with a study on OSW and community engagement, and that decision came after the TC discussed this Action Plan. Which of the efforts here would interact with their engagement process/ study? Corey recommended that we should look at the timeline of that effort and match everything up.
- Larry shared that the TC is not ready to share the Action Plan with the full WCMAC. He has submitted various edits and has yet to see them incorporated, and he requested an in-depth discussion on this document, including line-by-line review and revisions.
 - Nicole replied to Larry's concerns, noting that the TC has walked through the table as a group on multiple occasions, and has approved the approach outlined in the Action Plan as a group. Nicole agreed that we

can go over the document line-by-line in the November meeting, after incorporating any feedback from this meeting.

- Larry replied that he will submit possible edits, considering he didn't see much from his original edits in August. Nicole will follow-up with Larry directly.
- Larry requests an edit to Table 1 (OSW Data and Community Research Needs Identified to Date). On Item 1 under "OSW and Fisheries," he noted that the National Academies of Science's committee has not been very effective, and this item should also include outcomes from entities like NOAA NMFS and the Pacific Fishery Management Council.
- Nives shares that in response to what Larry is saying, we should pause and respond to the TC's concerns, while still meeting the timeline given by WCMAC.
- Brian commented that he liked the idea of adding a timeline to the prioritized themes, which will allow us to identify those that are easier to address. He agreed that the plan is not ready for the full WCMAC, and it's important to add Next Steps and narrow down a priority list.
- Dale shared that the TC hasn't explored the need for OSW in Washington. The TC does not know how much energy WA State needs and does not know how much WA-produced energy is being shipped out of the state. One of the items in the law is based on need, and that need won't be met in the ocean if there is a more efficient and cheaper alternative. Dale recommended that the TC look at the entire WA State Energy Strategy and identify energy needs for now and the future. We are not using our current capacity, so that is something to look at before finding new ways of spending.
 - Nicole replied that that is helpful in shaping the State Energy Strategy agenda item and prompting the future speaker.
 - Dale also commented that we need to identify the cost of energy, and what the cost is to consumers.
- Rich shared a few comments on the State Energy Plan. He recommended that the TC look at WA State's future energy needs, current hydroelectric sources and the implication of climate change on these sources and help identify data gaps. He noted that there needs to be more information on fisheries, migratory birds, and ESA-listed species. He agreed with the suggestion to add timelines to the Action Plan.
- RD agreed that the group is not ready to share the document and would like to add timelines.
- Mike O. agreed with Dale that the cost of these projects (both OSW and transmission improvements) has not been adequately discussed. Contractors are withdrawing contracts and there are six governors requesting higher federal subsidies. He shared that we still need to address the data gaps for hydrological and ecological elements. There is no current investigation and BOEM will not investigate, because it would disrupt their timeline goal, therefore they are going ahead with the project anyway. Mike commented that the coastal tribes are taking action and writing letters to BOEM, and we should take a further look at the comments from tribes.

- Nicole shared that based off of TC feedback, the document isn't ready. We will look into these notes and comments and revise where it makes sense. At our next meeting, we will go line-by-line, so please come to the meeting ready to discuss revisions.

Next Steps and Closing

Next Steps

- Facilitation team will streamline the shared folder to ensure easier access.
- Ecology will continue the data gap prioritization interviews for all categories.
- Sea Grant will continue to look for grants that may provide funding for collating public comments. Sea Grant will reach out to CA and OR about this work.
- Facilitation team will revise the Objective 2 Action Plan based on discussion.
 - Nicole will reach out to Larry about his edits to the Action Plan.
- Nives will send her proposal for studying coastal communities and issues with OSW.
 - Nicole will follow up with Nives about the OSU proposal.

Closing Comments

- Dale shared that he won't be able to attend the November OSW TC meeting (on November 21).

Appendix A

OSW TC meetings will not take place in the same month as WCMAC meetings. With that in mind, what is your preference for meetings moving forward?

- Option 1: Fewer, longer meetings: Quarterly, 3-4 hours in length.
- Option 2: More frequent, shorter meetings: Monthly (except during months when a WCMAC meeting is occurs), 2 hours in length.

| First Name | Last Name | Meeting Vote |
|------------|------------|---|
| Ann | Skelton | No preference |
| Brandii | O'Reagan | No preference |
| Brian | Polagye | Option 2 |
| Larry | Thevik | Option 2; thinks it should be 2.5 hours |
| Mike | Okoniewski | Option 2 |
| Nives | | Option2 |
| RD | Grunbaum | Option 2; Recommended having the flexibility for additional meetings as needed. |
| Rich | Doenges | Option 2 |
| Corey | Niles | No strong preference; Option 2 preferred |
| Matt | Niles | No strong preference; Option 2 preferred |
| Dale | Beasley | Option 2; Agreed with the note about having additional meetings as needed. |



Appendix C. Meeting Presentations

Please see available meeting presentations for the WCMAC meeting on the next page. Additional presentations will be incorporated when available.

Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration



**NATIONAL MARINE
SANCTUARIES**



Olympic Coast Ocean Acidification Sentinel Site

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NOAA's Olympic Coast National Marine Sanctuary
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Olympic Coast National Marine Sanctuary

- Established in 1994 and spans 3,188 square miles off the Olympic Peninsula of Washington state
- Protects thriving intertidal zones, kelp forests, and deep-sea communities
- Within usual and accustomed fishing areas of the Hoh, Makah, and Quileute tribes and the Quinault Indian Nation (Coastal Treaty Tribes)



What are sentinel sites?

Sentinel Sites are geographic areas focused on specific topics (ocean acidification, sea level rise, etc.) where coordinated observations and applied science by federal, tribal, state, academic, and community members enable early detection of ecosystem change in response to human or natural disturbance

Why the Olympic Coast?

Distinctive physical, biological, cultural, and governance attributes and vulnerability to acidification and other CO₂-related stressors



Ocean Acidification Sentinel Site (OASeS)

- Designated by Office of National Marine Sanctuaries 2019
- 20 entities and Co-chairs (2)
- Focus is on OA, but includes changing ocean conditions broadly (temperature, hypoxia, etc.)
- Three goals:
 - Informed management decisions
 - Strategic science collaborations for management needs
 - Ocean literacy, awareness, and stewardship for diverse audiences



OASeS Membership

Coastal Treaty Tribes

State Agencies

Federal Agencies

Non-governmental organizations/ reps

- Makah Tribe
- Hoh Tribe
- Quileute Tribe
- Quinault Indian Nation
- Governor's Office
- Ecology
- WDFW
- DNR
- Washington Sea Grant
- Olympic Coast National Marine Sanctuary
- NOAA's Pacific Marine Environmental Laboratory
- NOAA's Ocean Acidification Program
- NOAA's Northwest Fisheries Science Center
- Olympic National Park
- Washington Ocean Acidification Center
- OCNMS Sanctuary Advisory Council Chair
- Northwest Indian Fisheries Commission
- Surfrider Foundation
- Community at large representatives (2)



OASeS Priorities

- **Science** - Prioritize and coordinate research and monitoring efforts for acidification, ocean warming, and hypoxia on Washington's coast; studies that reflect coastal managers' information needs and place a premium on human dimensions; new technologies for field observations, remote sensing, modeling and data management
- **Management** - Data sharing platforms that provide managers with useful information in a timely manner; opportunities for direct consultation between scientists and managers; co-development of management strategies to address ocean change
- **Leadership** - Local to international leadership in innovative science-decision-making partnerships and approaches
- **Education** - Formal and informal educational activities and programs that tie into OASeS research priorities
- **Outreach** - A broad communication plan that leverages partners' capacity and reach; targeted outreach products and direct public engagement by OASeS partners

OASeS Symposium

- When: May 14-16, 2024
- Where: Rainforest Arts Center, Forks, WA
- What: Multi-day focused on management, policy, science, education, and outreach activities relevant to OA/changing ocean conditions on the Olympic Coast
- More information will be available on our website:
<https://www.olympiccoastsentinel.org/>

A scenic sunset over a rocky coastline. The sky is a mix of deep blue, orange, and yellow, with wispy clouds. The sun is low on the horizon, casting a golden glow over the water and the beach. In the foreground, there are several large, dark rocks partially submerged in the shallow water. In the background, a large, dark rock formation with a forest of trees on top is silhouetted against the sunset. The overall mood is peaceful and serene.

Questions?

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Image: Matt McIntosh