

<u>Board members present:</u> Lynn Palensky (NPRB), Kenny Down (NPFMC), Cheryl Rosa (USARC), Ginny Eckert (AK Sea Grant), Katrina Hoffman (PWSSC & OSRI), Katie Howard (ADFG), Megan Kohler (ADEC), Bob Foy (NOAA/AFSC), Margaret Williams (WWF), Ed Page (MXAK), Steve White (MXAK), Jim Kendall (BOEM), Dee Williams (USGS), Mike Miller (IPCoMM), Brad Moran (UAF/CFOS), Sara Longan (ADNR), Phil Thorne (USCG), Tara Reimer (ASLC), Cheryl Rosa (USARC), Amy Homan (NOAA), Amy Peloza (Hilcorp).

<u>AOOS Staff present:</u> Sheyna Wisdom, Molly McCammon, Carol Janzen, Holly Kent, Darcy Dugan, Jill Prewitt, Thomas Farrugia

<u>Guests</u>: Josie Quintrell (IOOS Association), Krisa Arzayus (IOOS Program Office), Rob Bochenek (Axiom Data Science), Aaron Poe (Alaska Conservation Foundation, afternoon presentation only), Russ Hopcroft (UAF, afternoon presentation only)

Meeting called to order at 9:05 via Zoom by AOOS Board Chair Katrina Hoffman.

Adoption of Agenda and Meeting Summaries for Spring (May 13, 2021) Board and June and August Executive Committee summaries.

Action Item: The meeting agenda, meeting summary for the May 13 Board meeting, and meetings summaries for the June and August 2021 EXCOM meetings were approved unanimously. Motion by Ed Page, second by Bob Foy.

UPDATE ON AOOS ACTIVITIES

AOOS Executive Director Sheyna Wisdom provided an overview of recent and upcoming AOOS activities and participation in state, national, and international level initiatives.

Administrative:

- Sheyna is past her 6 month mark
- Working on administrative processes, project management, tracking sheets for proposals, engagement, project information
- New agreement with fiscal agent, ASLC, executed
- Work on AOOS 501(c)(3) will resume this winter
- Office space lease will be renewed
- Axiom contract renewed

Conference Highlights:

- Kawerak Knowledge & Sovereignty Workshop
- AEWC Triennial Convention
- Joint Contingency Planning Exercise US-Russia
- USCG MORPAG stakeholder engagement meeting
- Polar Data Forum

- ARCUS Community & Citizen Science in the Far North
- PICES Monitor Community Meeting

National/International activities:

- IOOS Fall Meeting, Association Board meetings, Coastal Climate Working Group
- IARPC Environmental Intelligence Collaboration Team co-lead (Molly)
- NOAA Science Advisory Board Ecosystem Management Working Group (Molly)
- Upcoming national conferences
 - o CERF
 - o Marine Risk Symposium
 - AGU Fall meeting
 - Alaska Marine Science Symposium
 - Ocean Sciences Meeting
- UN Decade of Ocean Science (UNDOS)
- Arctic Observing Summit

Reflections from her first 9 months

- Working on building relationships and improving processes with ASLC finance, Axiom staff, PIs
- Next steps continue learning from Molly; find ED role in supporting work of AOOS staff; building relationships with Axiom, AOOS Board/ExCom, IOOS colleagues; focus on engagement

Discussion from ED Report:

- Margaret Williams highlighted the Joint Contingency Planning meeting between US-Russia as one of the positive highlights in relationship with Russia, and that the AOOS Tool that is being developed was featured at the meeting. This is a high priority group for US and Russia, and it was important for AOOS to be part of this meeting.
- The Board inquired what the staff's view on the key takeaways from all of the conferences were. Sheyna noted that it was clear that engagement was key, and continuing to focus on continuing outreach, especially to Indigenous communities, was important. Molly noted that for many of these conferences, AOOS is being asked to present, which highlights that AOOS' observations and assets are a key part of the overall observing assets in Alaska.
- The Board inquired on the status of the strategic plan. This will be a focus during the next quarter, however, unless the Board would like to see changes, it will follow the 5-year IOOS proposal submitted in December 2020 and forms the basis of the new IOOS Cooperative Agreement. The work this winter will be primarily to package the proposal in a more easily digestible format.

UPDATE ON IOOS ACTIVITIES

IOOS Association Director Josie Quintrell presented to the Board the IOOS Associations work on the 5year Strategic Plan, with the top priorities being increasing funding, improving the visibility of IOOS, increasing coordination between the RAs, and increasing diversity and inclusion in IOOS processes. She updated the Board on the status of the IOOS appropriations request which includes the Fill the Gaps campaign for HFRs, gliders, HABs and other projects; the Infrastructure Bill includes funds for maritime commerce and operations, resilient communities, and the blue economy; plans for a workshop on the Coastal Climate Signal; the IOOS DEIA fellowship is expected to start in January; development of the IOOS Communications Plan; IOOS Fall Meeting, including highlighting the importance of the new NOAA Administrator Dr. Rick Spinrad's knowledge and respect for the work of IOOS as an opportunity for the IOOS community; and called for nominations for the CARAID Award. Josie also thanked Molly McCammon for her service, leadership, and vision to the IOOS Association since its inception.

The Board also thanked Josie for her value to the IOOS Association.

 Amy Holman - With your congressional and administration interactions, do you see any particular new opportunities for AOOS to lead on the national stage the Board should take under consideration? Josie - providing services to remote/underserved communities, AOOS working from the start, getting information out to stakeholders, AOOS is leader

UPDATE ON IOOS PROGRAM OFFICE

Krisa Arzayus updated the AOOS Board and staff on the relevant Executive Orders – climate change, racial equity, memo on scientific integrity, and protecting the federal workforce; the IOOS Office Priorities – climate data and services, improved coastal resilience including coastal modeling and predictions, and economic opportunities; the President's Budget; and the Infrastructure Bill.

BOARD MEMBERSHIP

Ed Page shared his thoughts on serving on the AOOS Board for 10 years, including time as Chair. He noted that AOOS is a classic public-private partnership to leverage funds for infrastructure. He highlighted the real-time weather observations supported by AOOS for the Marine Exchange of Alaska, and their importance for decision-making that affected maritime safety, and weather forecasting by the NWS. He noted that boaters of all types use this information, and that this is the Blue Economy. Ed introduced Steve White who will be taking over as Executive Director of MXAK ED role. Molly thanked Ed for his years of work with, and in support of, AOOS.

Action Item: <u>Approval of Steve White (MXAK) to AOOS Board</u> - motion by Phil Thorne (USCG), second by Tara Reimer (ASLC), passed unanimously. The Board welcomed Steve and noted their appreciation of Ed's contributions.

Action Item: Approval of Megan Kohler (DEC) Board representative - motion by Jim Kendall, second by Sara Longan, passed unanimously. The Board and staff welcomed Megan.

Update on Regional Alaska Native Organization Board Membership

Darcy Dugan presented a proposal for the process to add four Indigenous organizations to the AOOS Board. The Board provided ideas for additional organizations to consider, discussed the breakout of the regions, and revisited the discussion of whether Board members should represent organizations or can serve as individuals. There is a lot of interest on this topic and a separate Board meeting will be organized this winter for further discussion.

IOOS COOPERATIVE AGREEMENT UPDATES

Sheyna updated the Board on the status of the "old" Cooperative Agreement (FY16-21) including nocost-extensions, an additional project that was funded, and new equipment purchases. Sheyna also updated the Board on the status of the "new" Cooperative Agreement (FY 22-26) including the execution of new subawards, PI kickoff webinars, and Project Management roles for AOOS staff. She highlighted the excellent work and communication of Holly Kent and Tara Miller (ASLC) throughout this process. Sheyna also provided the Board an overview of the budget which was previously approved by the Board and the EXCOM.

PROPOSAL UPDATE

AOOS introduced a new format for sharing information on proposals with the Board, which received positive feedback from Board members. Since May, AOOS submitted four proposals that were funded, six proposals that were not funded, one that is still pending.

Awarded projects include:

- NPS Beringia: Integrating Russian datasets
- EVOS: Gulfwatch Alaska LTER Research, Monitoring and Data Management Program
- NSF: Convergence Accelerator Sofar Wave Buoys in Indigenous Communities
- Alaska Sea Grant: HABS and OA sampling in the Aleutians and Pribilofs

NEW PROJECT UPDATES

Aaron Poe - Northern Latitudes Partnership

Aaron briefed the Board on a new project that will use AOOS funding to support water sampling for harmful algal blooms (HABS) in three communities in Western Alaska or the Arctic. The goal is to onboard six to nine local community members to conduct weekly water sampling spring through fall. The project will use a mechanism initiated by the Northern Sentinels program that allows small amounts of money to be transferred to individuals using a similar platform as Uber. Aaron will be working with AHAB coordinator Thomas Farrugia at AOOS to implement the project. The participating communities are TBA.

Russ Hopcroft - University of Alaska - CFOS

Russ briefed the Board on sampling along the Seward Line, a transect in the Gulf of Alaska where data have been recorded continuously for the past 25 years, with some data collection extending back to the 1970's. Currently, three cruises are conducted per year to gather long term observations on physics, chemistry and lower, middle, and upper trophic levels. Seabird and marine mammal observations are documented as well. Time series have provided the ability to document multi-year periods of hot and cold, as well as composition of phytoplankton communities and the timing of the spring bloom. Some notable points included that overall biomass remains relatively stable with some shuffling of dominant species, and that 2021 had the most widespread and prolonged phytoplankton bloom recorded.

AOOS PROGRAM UPDATES

Marine Operations, Coastal Hazards and Ecosystems & Climate Portfolio Updates

Carol Janzen provided an update on Alaska Water Level Watch (AWLW) activities including GPS Reflectometry recently installed in Utqiagʻvik, a NWLON-lite water level station set for installation in Dillingham in October, and a project to provide bathymetric surveys in 8 western Alaska communities using a Hydroball System. A project to install coastal cameras in Shaktoolik and Napakiak has been delayed. On the buoy front, AOOS is involved in the logistics surrounding four CDIP buoys: lower Cook Inlet, the Bering Strait, Kodiak, and one planned for Bristol Bay. This past season High Frequency Radar (HFR) stations were operational in 3 locations in the Bering and Chukchi. A new station will be southward looking in the Bering Strait in 2022, and an existing station will be refurbished for Cook Inlet. AOOS continues to contribute to two moored observatories (Gulf of Alaska, 3 years running; and Chukchi, 7 years running). AOOS has also helped purchase sensors for the EcoFOCI moorings M2 and M8 in the Bering Sea, and ocean acidification sensors for the Beaufort LTER. With respect to gliders, AOOS continues to support the Chukchi Sea marine mammal glider which was out for 2 months this summer, and is supporting upgrades to the University of Alaska glider fleet.

Alaska Harmful Algal Bloom Network

Thomas Farrugia provided an overview of the AHAB Network which was launched in 2017 and has been growing steadily, adding both organizations and individual members. The Alaska HABS Action plan is now complete, defining the role of the network, AOOS, the coordinator, and laying out a collaborative framework to address the risk of HABS to humans and wildlife.

Thomas noted that the plan is ambitious in nature and includes a lot of goals and activities for the next five years. Some of his current objectives are to create an inventory of where people have sampled, are currently sampling or need to sample; expand the capacity of labs in Alaska to analyze samples in state; and further develop the AHAB data portal to include statewide data.

Alaska Ocean Acidification Network

Darcy Dugan briefed the Board on a new carbon policy podcast produced by the Alaska OA Network in response to information needs voiced by the fishing industry. The 6-part podcast, called "Our Future Ocean: what can carbon policy do for the ocean and our fisheries?" is available on Spotify and Apple Podcast and the network is working on circulation. Dugan also provided updates on the status of crab in the Bering Sea, preliminary results from a recent project on OA & salmon, and recent and planned presentations. An upgrade to the OA Network website is underway and the new version will include a section on the 'State of the Science' for Alaska species and conditions in ocean basins.

Bering Sea Projects Update

Jill Prewitt briefed the Board on several Bering Sea projects including a US-Russia Joint Contingency Plan Meeting & Exercise in September organized by NOAA and the Coast Guard. The meeting involved a tabletop exercise simulating an oil spill scenario to develop a common operating picture. Jill also provided an update on a new product under development called the Bering Strait Transboundary Incident Response Tool. The tool is needed as vessel traffic increases, particularly on the Russian side, and US ERMA (NOAA's incident response tool) doesn't include a lot of Russian data and isn't accessible to the Russians. The tool will include transboundary data and information for planning, prevention, and response. WWF is a key partner, providing the primary funding and helping identify the data. Jill showed animations of the tool in progress. Next steps include vetting the tool this spring, soliciting feedback, and ingesting new data identified. An advisory committee will provide input and many agencies and entities will help with outreach.

Axiom Update

Rob Bochenek provided a status update, explaining that Axiom is shifting focus from a data repository to a data hub -- building tools with the data for specific audiences. Stacey Buckelew gave a tour of the

Alaska Mariculture Map, a product developed in partnership with ADFD, Sea Grant, NOAA and others to help users walk through permit applications for shellfish or kep farms. BJ Stone provided a demo of the Alaska Storm Surge Forecasting System – ADCIRC which provides a comparison of model and actual water level stations for locations across Alaska.

OCEAN ROUNDTABLE

Lynn Palensky (NPRB): NPRB had a Board meeting and has a new suite of members so it is a new Board. Just approved 11 core programs for \$3.1M. Just released IERP RFP for \$1.95M and some partnership (\$2.2M total). Short time frame for RFP. There is a workshop this week with PIs for IERP hosted by NPRB. Also invested in additional ship time for IYS project winter surveys in 2022. New partners to co-fund projects.

Tara Reimer (ASLC): ASLC Ocean Leadership Award will be launched in the next few weeks and the ASLC will be asking the Board to help to get the word out. Categories are the same as previous years. They are hoping to have an in-person Alaska Marine Gala in February.

<u>Jim Kendall (BOEM)</u>: Still have lease sale planned for Cook Inlet in Jun 2022. Revised DEIS coming out soon Liberty still paused (due to Court Case). BOEM is looking to host a town hall on ocean renewable energy in AK at AMSS. Elsevier will be publishing a book called "Partners in Marine Research". Jim is lead author for chapter 11, how partnerships have evolved over the past 50 years.

Bob Foy (NOAA AFSC): Efforts to push climate fisheries initiative nationally has funding in the current Senate bill. The expectation is \$5-6M for building predictive marine models in the Bering Sea region. These efforts would help address big regional issues like declines in crab and salmon.

Ed Page (MXAK): MXAK is an information broker. AOOS' mission is aligned. Also has to do with fisheries management, but also maritime safety. AOOS has done a great job at facilitating this shared information. Shared all kinds of information about MXAK.

Kenny Down (NPFMC): The king crab fishery in the Bering Sea was closed at the recent NPFMC meeting and snow crab was cut by 90%. They also heard testimony by Native communities in Unalakleet and Yukon-Kuskokwim about low salmon numbers and expect to see further potential declines. NOAA AFSC provided some excellent materials at Council meetings to help the Council be well-informed. EFH process updates are underway with expected completion in 2022. They received a Climate Regional Action Plan for GOA, Bering Sea, and Arctic. Strong key gaps in what they've been able to receive with lack of monitoring with some strong support for additional fishery surveys. Funding gaps have highlighted the need to be able to look at predator-prey relationships. The diet lab could use some funding to better measure impacts of climate change. Also update on funding from NOAA Climate Fishing Initiative. This initiative will help identify gaps for NPFMC to better inform for better management in a rapidly changing environment.

Ginny Eckert (ASG): Alaska Marine Policy Forum tomorrow at 1pm AKDT.

Katrina Hoffman (PWSSC/OSRI): When we think about Board member job descriptions emphasize the mission-driven focus and partner focus. PWSSC and OSRI are working with AOOS, NOAA, and CIRCAC to collect historical data for Cook Inlet model validation (<u>www.osri.us</u>). OSRI is also working on environmental sensitivity index (ESI) maps so looking for information.

Dee Williams (USGS): Look out for forthcoming products from IARPC with DOI playing a lead role. Recently had an annual principles meeting for two products: 1) end of plan report for 2017-2021 Arctic Research Plan with materials of interest to everyone on this Board and 2) 5-year plan in its final draft and under review by White House, expected to be approved and released to the public Dec 2021 at AGU meeting. The new plan has a different focus - earth system science but well connected with human focus, which has not been a priority in the past: Community Health, Hazard Mitigation and Resilience, Economic Prosperity. DOI also initiated a series of Tribal Listening Sessions that will include State of Alaska planned events with effort to get inputs from native communities. Also has a lead from BIA on getting community input on coastal resilience issues, particularly adaptation.

The meeting adjourned at 3:30pm. Motion by Steve White, Seconded by Kenny Down.