

## **AOOS Board Meeting Summary**

### **Fall Board Meeting**

**September 29, 2022**

#### **AOOS Conference Room**

**Board Members Present:** Katrina Hoffman (PWSSC), Cheryl Rosa (USARC), Lynn Palensky (NPRB), Dee Williams (USGS), Amy Holman (NOAA), Meghan Kohler (ADEC), Brad Moran (UAF), Chuck Wheat (Hilcorp), Steve White (MXAK)

**Board Members Online:** Ginny Eckert (ASG), Katie Howard (ADFG), Phil Thorne (USCG), Margaret Williams (WWF), Mike Miller (IPCOMM), Bob Foy (AFSC), Kenny Downs (NPFMC)

**Board Members Not Present:** Jim Kendall (BOEM), Tara Reimer (ASLC), John Crowther (ADNR)

**AOOS Staff Present:** Sheyna Wisdom, Carol Janzen, Holly Kent, Thomas Farrugia, Megan Onders, Molly McCammon

**Guests Present:** Nathan Wardwell (JOA Surveys), Alice Bailey (UAF, soon to be AOOS)

**Guests Online:** Josie Quintrell (IOOS Association), Carl Gouldman (IOOS Program Office), Schuyler Nardelli (IOOS Program Office), Natalie Monacci (UAF)

**Meeting called to order at 9:00 am by AOOS Board Chair Katrina Hoffman.**

#### **Adoption of Agenda, Board Meeting Summary, and Executive Committee (ExCom) Summaries.**

- **Action Item:** Motion to approve draft meeting agenda, Board summary from Apr 2022, and ExCom summaries from Jun & Jul 2021 by Cheryl Rosa, second by Brad Moran.

#### **IOOS Program Office Update, Carl Gouldman**

Carl provided an overview of IOOS priorities with a highlight on equitable service delivery, blue economy, detecting coastal climate signal, and budget updates.

- **Budget:** The FY22 budget was \$69.5M, enacted was \$41.0M. The FY23 looks like it will be a Continuing Resolution: House Mark is \$44M, Senate Mark is \$46M. The FY22 Infrastructure and Investment in Jobs Act (IIJA) is now called the Bipartisan Infrastructure Law (BIL) included 3 Provisions for IOOS: 1) Prov 3 for flood inundation mapping (\$4.5M), 2) Prov 11 for coastal and ocean observations (\$7.3M), and 3) Prov 12 for regional ocean partnership (ROP) (\$1.8M). The FY23-26 Inflation Reduction Act (IRA) included \$3.3B for NOAA over 5 years for coastal, economic, and climate resilience.
- **Blue Economy:** There are 314 more companies and 8 more states involved in the Blue Economy. The [NOAA FY22-26 Strategic Plan](#) focuses on the blue economy. IOOS is in a key position as a key leader in this. IOOS regions are a trusted agent at the coast to integrate ocean information.
- **Regional Use Cases:** Benefits of Ocean Observation Catalog ([www.booc.info](http://www.booc.info)). Backyard Buoys is another example.

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- **Upcoming announcements:** [IOOS 2022-2025 Strategic Plan](#) was refreshed in Aug 2022 and will be implemented in fall 2022. The IOOS Advisory Committee Public meeting will be in late Nov/early Dec. The IOOS Fall meeting is in November in Puerto Rico. New IOOS Association Director will start in October: Kristen Yarincik.

**Discussion:** UAF wanted to make sure Carl knew about the Blue Economy Center at UAF. There was a question about the timing of the IIJA/BIL funding, expected to come out in the next 3-6 months. There was also discussion about how Dr. Spinrad's visit to Alaska will be potentially good for Alaska.

**IOOS Association Update, Josie Quintrell**

IOOS Association is a nonprofit organization working on behalf of the IOOS Program Office and with the 11 Regional Associations (RA). We focus on emerging issues and special projects, as well as advocacy in Congress. Each RA appoints two Board members from each RA - Sheyna and Katrina are AOOS members. Shoutout to Sheyna and crew for getting Phase II funded for Backyard Buoys project. IOOS Association has developed the 5-year plan (<https://ioosassociation.org/resources/#>). IOOS Association wrote a letter requesting funds under IRA and are advocating for funds under CHIPS Act. Josie also gave an update on the HABS Network Framework on which Thomas is now a Steering Committee member. Molly continues to sit on the Detecting the Coastal Climate Signal working group. Also want to welcome Kristen Yarincik as the new Executive Director. Josie will stay on as Advisor for a period of time. Congrats to Molly for winning 2022 Caraid Award - will be honored at the IOOS Fall meeting this November.

**Discussion:** Board thanks Josie for the incredible work she has done as Director and that while Kristen is a rock star and will be great, she has big shoes to fill.

**Update on AOOS Activities by AOOS Executive Director, Sheyna Wisdom**

Sheyna provided an overview of recent and upcoming AOOS activities and participation in state, national, and international level initiatives and reflections on the past year and coming year. (Details in board packet).

**Discussion:** Board suggests that AOOS should be aware of opportunities for the hurricane support supplement that will come out of Hurricane Ian and Typhoon Merbok.

**AOOS Proposal Update**

Since May 2022, AOOS has partnered on three proposals in which AOOS is an unfunded partner; two of which have been awarded. We partnered on Phase II of NSF Convergence Accelerator program in May 2022 and were recently notified we were selected! We also submitted the IIJA proposal in Sep 2022. (Spreadsheet included on Board packet.)

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**New AOOS Awards**

**IIJA Request for Award (RFA)**

AOOS submitted the RFA included two focus areas:

- Topic Area 1: To support improved and enhanced coastal, ocean, and Great Lakes observing systems. Year 1 \$582,000; Year 2 \$587,000.
- Topic Area 2: To enhance associated sharing and integration of Federal and non-Federal data by Regional Ocean Partnerships (ROP) or their equivalent development and on shifting models and technologies into operational status. Year 1 \$468,500; Year 2 \$368,500/
- Total \$1,906,000 for 2 years
  
- **Action item:** Motion to accept IIJA award by Steve White, second by Dee Williams.

**National Science Foundation (NSF) Convergence Accelerator Phase II**

The team of NANOOS, PaCIOOS, and AOOS was awarded Phase II of the NSF Convergence Accelerator program. The period of performance is Oct 1, 2022 – Sep 30, 2024. Phase I was the planning phase, Phase II is the implementation phase. Total project is \$5M, AOOS portion with all the subs is \$1,679,447. Our Indigenous partner is the same: Alaska Eskimo Whaling Commission (AWEC), but the team has expanded to include a project management team (Weston Solutions), education partner (Alaska Native Science & Engineering Program [ANSEP]), UAF, and ADNR. We plan to deploy ~60 wave buoys across Alaska coast, although not all in one year. The key aspect of this program is the co-production, not necessarily the wave buoys.

- **Action item:** Motion to accept NSF Phase II award by Cheryl Rosa, second by Amy Holman.

**FY16-25 Agreement Update**

Sheyna provided an update on the AOOS FY16-20 Cooperative Agreement. The No Cost Extension (NCE) for the three subawards is through May 31, 2024. All the remaining subawards are on track for closeout. Sheyna also updated the Board on the issue with the NOAA accounting system that resulted in months of delay. ASLC staff did a great job in dealing with this issue. The June progress report was approved and the December report will be completed on time.

**FY21-25 Agreement Update**

Sheyna provided an update on the AOOS FY21-25 Cooperative Agreement. Years 1 and 2 descope are all completed and approved. Subawards and contacts for Year 2 are 95% complete, which is the first time that this is done by this time! The July progress report was approved and the January report will be completed on time.

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**Other External Awards**

Sheyna provided and update on awards to AOOS, including updates for the 1) the NSF Convergence Accelerator Phase I; 2) the WWF/NPS Bering Sea Transboundary Incident Response Tool; 3) the BOEM Beaufort Waves Project; the OTT University of Notre Dame Storm Surge; and the retiring and new award EVOSTC (Exxon Valdez Oil Spill Trustee Council) Data Management Program. Information is provided in the Board packet.

**Election of New Officers**

Per the AOOS Operating Procedures, the Executive Officers term is two years. The current officers are Katrina Hoffman, Chair; James Kendall, Treasurer; and Cheryl Rosa, Secretary. The Vice-Chair position is currently open with the loss of Sara Longan last spring. A Nominating Committee was formed at the May 2022 Board meeting to solicit interest in the Executive Officers for this Board meeting. The Nominating Committee recommended the following: 1) Renew terms of service for Executive Officers currently serving as Chair, Secretary, and Treasurer and 2) Fill the vacancy in the Vice-Chair position with Amy Holman who is willing to serve.

- **Action item:** *Motion to accept Nominating Committee recommendations by Dee Williams, second by Lynn Palensky.*

**Acceptance of New Board Member**

Hilcorp Alaska has made changes to their Environmental Group. Amy Pelozza (current Board representative) recommends that Chuck Wheat replace her as the new representative.

- **Action item:** *Motion to accept Chuck Wheat as new Hilcorp representative by Lynn Palensky, second by Amy Holman.*

**Executive Session for New Board Member**

- **Action Item:** *Motion to move into Executive Session Cheryl Rosa, second Brad Moran.*

Martin Robards of Wildlife Conservation Society (WCS) selected as new NGO Representative to replace Margaret Williams of WWF as Margaret has retired from WWF.

**Update of AOOS Operating Procedures**

Sheyna presented updates to the AOOS Operating Procedures and addition of two new policies. The Board reviewed the documents and suggested changes on the document on the screen. The final policies and documents were approved.

**Board Travel Expense Reimbursement Policy**

Board recommended removal of reimbursement of honorarium from the proposed policy.

- **Action Item:** *Motion to approve Board Travel Reimbursement Expense Policy as amended by Steve White, second by Brad Moran.*

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**DEIA Policy**

Board recommended minor changes to the proposed DEIA policy.

- **Action Item:** Motion to approve DEIA Policy as amended by Amy Holman, second by Lynn Palensky.

**Operating Procedures**

Board recommended minor changes to the proposed Operating Procedures based on the two previous policies.

- **Action Item:** Motion to approve Operating Procedures as amended by Cheryl Rosa, second by Steve White.

**Governance Committee**

A Governance Committee was established to discuss important issues for AOOS moving forward including 501(c)(3), Alaska Native Board seats, and overall Board membership.

**Members include:** Lynn Palensky, Brad Moran, Katrina Hoffman, Megan Onders, Holly Kent, Sheyna Wisdom.

**Members to be invited:** Debra Hernandez and/or Jake Kritzer from other RAs that are nonprofits.

- **Action Item:** Motion to establish Governance Committee with no more than 12 members by Dee Williams, second by Lynn Palensky.

**PI Updates**

**Nathan Wardwell, JOA Surveys**

Nathan is the Managing Partner of JOA Surveys LLC, a small business located in Anchorage that specializes in measuring water levels for tidal datum determinations. The purpose of the AOOS project is to provide near real-time Tier-B water level data in gaps identified in NOAA Technical Memorandum NOS CO-OPS 0048: A Network Gaps Analysis for the National Water Level Observation Network (NWLON). The work in this project will be focused in the region identified as Alaska NWLON gaps 16, 17, and 18. The project is ongoing and may include work at water level stations in other regions of the state. JOA Surveys has also been contracted by AOOS to provide GNSS-R derived water level data from Peterson's Bay using UNAVCO satellite data, and to work with AOOS in determining datums for other GPS-R/GNSS-R stations in Alaska, including Utqiagvik, St. Michaels, and Cape Spencer. They assisted Orion Space Solutions on the successful deployment of a GNSS-R station in Utqiagvik in the fall of 2021, and earlier AOOS GPS-R installation trials in Seward and Homer.

**Natalie Monacci, UAF**

Natalie Monacci is a chemical oceanographer and the lead for the Ocean Acidification Research Center (OARC) in the College of Fisheries and Ocean Sciences (CFOS) at UAF. Natalie served on the first Executive Committee to help launch the Alaska Ocean Acidification Network and remains an active member. Natalie is the PI for several AOOS funded projects assessing the

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marine carbonate system in Alaska's coastal waters. She leads the Alaskan sites for the National Ocean Acidification Observing Network. These long-term surface platforms provide autonomous observations to characterize the seasonal and inter annual variability of surface ocean carbon dioxide. With support from AOOS, Natalie also partners with NOAA's Alaska Fisheries Science Center and Pacific Marine Environmental Laboratory to add marine carbonate system observations to several oceanographic surveys in the Chukchi and Bering Seas and the Gulf of Alaska.

Carol Janzen, AOOS, Update on Gliders and Weather Stations

Carol provided an update on the MXAK weather installation to transmit real time weather through AIS to vessels to improve maritime safety. 7 new sites were installed in 2021, 5 new sites were installed in 2022, and 2 more are planned this year. All existing weather stations have been upgraded to improved sensors. Optical cameras have also been installed at Homer for time-lapse imagery. Carol also updated the group on the Chukchi glider that was deployed this summer. Data were posted real time on the data portal

(<https://portal.aos.org/#platform/4cfebc24-bd82-50b7-8971-090af8c331f8/v2>) and the glider was picked up by the R/V *Woldstad* after losing comms.

Thomas Farrugia, AOOS, Alaska Harmful Algal Bloom (AHAB) Network

Thomas gave an overview of the AHAB Network. The Network formed in 2017, Thomas was hired in 2020. The AHAB Action Plan has been finalized and further defines the network and lays out the goals. It has expanded to over 55 organizations with over 30 participants in the monthly meetings. AOOS has received increased funding in Year 2 for additional toxin testing at DEC, as well as continuing the HABs sampling project. The AHAB data portal is under development ([ahab.aos.org](http://ahab.aos.org)) and we continue to stay active in all things HABs!

Megan Onders, AOOS, Director of Engagement

Our engagement implementation plan is an Excel doc with all the assets, partners, and engagement opportunities we are or should be doing. Talking with community members during and after the storms, it is clear that we need the robustness of the NWS to provide that information to people. We will keep building out this engagement plan, and if you have any information that you'd like to share, we want to build a robust list of contacts. We started a KNOM radio show that focuses on the policy, management, and science of the Bering Sea. We feature scientists, managers of the oceans, and also traditional knowledge holders. How do we transfer that intergenerational knowledge? My role as Director of Ocean Engagement is to build this Ocean Observing System in our state!

Rob Bochenek, Axiom

We are using this hub diagram as a conceptual framework for moving into the future. We have done a big job of gathering ocean data. We are the stewards of 90% of the ocean data in Alaska. We want to build connections to these other sectors. Right now we have a strong connection to research entities and the IoT. We are not as connected and don't have as many connections to regulatory and management groups. Also ocean stakeholders, we've dabbled in it a bit, but no established pathways. This is guiding a lot of the strategic planning between

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AOOS and Axiom. A very cool thing about the AOOS system is that it is funded at a level that it leverages itself for other operations, and it allows AOOS to do things that other groups just can't do. For example, NCCOS wanted to develop 2 suitability analyses for aquaculture and mariculture operations. This was only possible with the AOOS data and framework that was already in place. Another example is the CIOFS model that is being funded by a patchwork to meet the needs of the project. And we wouldn't be able to do this without the core funding from AOOS. We are also involved in strategic meetings to define the future of the AOOS data system and cyberinfrastructure.

Typhoon Merbok Support

AOOS provided support to NOAA for daily multi-agency briefings during the storm event including the Nome CDIP wave buoy and the links to the Alaska Water Level Watch and ALCOFS storm surge model.

Video of wind and water level during the storm:

<https://portal.aos.org/#dashboards/model/b64896cf-359e-41f2-b441-04c8e98d45f5?config=merbok>

Portal map layer: <https://portal.aos.org/?ls=IBtsTAZ2#map>

**Ocean Roundtable**

Board members share news and activities from their organizations.

- **NPFMC (Kenny Down):** Very excited to see all that is happening at AOOS. The Ecosystem Committee will be meeting next week in Anchorage. We are looking at the Essential Fish Habitat (EFH) finder. In February in Seattle we are taking the final action on our 5-year review plan. When that's done, one of the next steps may be to open up a nomination process for areas that are of particular concern. One of the things we wanted to do was to get the EFH done before the HAPC proposal. Fantastic meeting today!
- **AFSC (Bob Foy):** Some awareness for the AOOS team: NMFS is revising its next generation data acquisition plan. It's a complete reassessment of the type of data we need to collect to meet the mission. It's an opportunity for us to step back and say we need more data innovation tools, or ecosystem moorings, unmanned systems, eDNA, etc... It's an internal NMFS document but hopefully it will be out in the next few months and hope it will be useful to our partners. Also, Northern Bering Sea survey continue to be annual, and have funding into the near future. Unfortunately the Dyson lost an engine so we had to cut our survey short last week. Also if funds comes through there will be more funding for NMFS ecosystem functions. If FY24 budget goes through there is also more funding for that in there. Finally, the Central Arctic Ocean Fisheries Agreement which has a 16 year moratorium of fishing in the arctic, and groups are getting together to put together a workplan for research. There's a recognition that the Arctic gateway is a big part of that.
- **WWF (Margaret Williams):** Wanted to report on the NGO community - there's a project completed by the Audubon Society. AOOS houses the marine synthesis. They just did a

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migratory bird product and will send a link to that. Also, last year we had great discussions with our Russian colleagues, and it's such a pity that all contact has come to a stop at a critical time. So I was thinking of a roundtable discussion about Russia and what we could be doing, any contacts we might still have there, etc... We are thinking of putting together something around AMSS, so if anybody has any ideas, please let me know.

- **IPCOMM (Mike Miller):** Couple items on marine mammal management stuff. This summer we spent quite a bit of time with DC folks and there was progress. We'll hopefully see some strong new terms in co-management structure. We're finally starting a project on marine mammal co-management in the western part of the state. We are having our annual meeting 19-20 of October during AFN. And we are doing an open session at AFN to talk about MMPA and co-management.
- **ASG (Ginny Eckert):** There are a variety of new research projects related to aquaculture that will have lots of opportunities for synergy and understanding the opportunities for mariculture.
- **ADF&G (Katie Howard):** In the next couple of days there will be a big synthesis symposium on the IYS, including a debrief on the 2022 work including the glider that AOOS sponsored. That's in Vancouver next week. The Alaska bycatch review task force also submitted their preliminary recommendations. ADF&G is starting juvenile salmon surveys in the coming years and could include other data collection as well.
- **USARC (Cheryl Rosa):** Pretty close to final draft of our report (FY23-25 goals report). Our chair just gave congressional testimony about that. And we will be having our meeting in Fairbanks on October 25-26, no zoom but will have audio. We'll have sessions focused on our 5 goals and sessions on yukon salmon. We should have a draft agenda posted by next week.
- **USGS (Dee Williams):** Earlier this year, the House subcommittee requested a report on observation assets for the arctic and what future appropriations need to take into account. I'm on the writing team for the report to congress, and it should be completed by December. They talk about 5 domains, including marine. In that respect there isn't a strict division between Alaska and the Arctic, so this may yield some interesting outcomes. The report suggests that congress take under advisement the report and come back and ask for an implementation plan which will trigger a larger community workshop for the top priorities to bring to congress.
- **NPRB (Lynn Palensky):** We had our Board meeting last week. We have 3 long term projects, our Board voted to renew the funding for those 3 projects, with a 10% increase. AMSS - the new website is live and the abstract portal is open. Closes on Oct 21, at which point we'll load up all the info about the meeting itself. It'll go back to the traditional schedule of plenary sessions and working groups. It's at the Dena'ina Center because of scheduling. We created a founders group since this is the 30 year anniversary, to be a high-level guidance for AMSS. We'll send out our sponsor letters soon.
- **MXAK (Steve White):** Great Board meeting, love hearing about all the different reach you all have. Marine Exchange continues to build out weather stations along with AIS stations. We're finding that NWS wants stations in certain areas, but then users want



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them in other locations for real time results. So we're trying to balance those two out, and coordinating with other groups putting out other stations. We'll have room to have more coordination in the future. We're also working on exchanging info with mariners. There's lots of information, but if you're going to operate in the Arctic, where's all the info you need about communities, marine mammals, etc... It's out there but there's no 1-stop place. We want that to be done collectively, and having a way of managing that through the watch center. More to follow on that.

- **PWSSC (Katrina Hoffman):** The PWSSC installed and maintained a weather station. The pre-proposal on fisheries adaptation planning has been invited to a full proposal. More federal dollars will come Alaska's way so having these discussions will be an important start.
  
- **Action Item:** *Motion to adjourn the Board meeting Cheryl Rosa, second Steve White*

**Adjournment at 4:20 pm.**