

AOOS Board Meeting Summary
Spring Board Meeting
April 7, 2023
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: Phil Thorne (USCG), Cheryl Rosa (USARC), Tara Reimber (ASLC), Megan Kohler (ADEC)

Board Members Not Present: John Crowther (ADNR), Mike Miller (IPCoMM), Martin Robards (WCS), Bob Foy (AFSC), Kenny Downs (NPFMC), Katie Howard (ADFG)

AOOS Staff Present: Sheyna Wisdom, Carol Janzen, Holly Kent, Thomas Farrugia, Jill Prewitt, Molly McCammon, Alice Bailey

Guests Present: Matthew Robinson (Murkowski office)

Guests Online: Kristen Yirincik (IOOS Association), Carl Gouldman (IOOS Program Office), Maria Murray (IOOS Program Office), Donna Hauseri (UAF), Tyler Hennon (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 Sep 2022, and ExCom summaries from Oct 2022, Jan & Mar 2023 by Ginny Eckert, second by Steve White.*

IOOS Association Update, Kristen Yarincik

Kristen Yarincik, the IOOS Association Executive Director gave an update on IOOS Association activities.

- **Overall IOOS Association Activities:** Offshore wind committee, marine carbon dioxide removal, marine life forum, National HAB Observing Network, coastal climate signal, facilitating cloud computing at the RAs, Center for Blue Economy valuation study, FY24 testimony, Congressional engagement, infrastructure and IRA communications, NOS roundtable, NAML public policy, DEIA strategic goals and new committee to build on fellowship success, 2023 spring meeting in DC.
- **Appropriations:** FY24 line is at the same as enacted in FY23 - good news. Core: \$50M, infrastructure: \$25.5M, total IOOS request for regions: \$80.5M.
- **Dear Colleague Letters**
 - Senate leaders: Cantwell and Wicker (29 signatures)
 - House leaders: Pingree, Posey, Carbajal (60 signatures)

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- Challenges: House expected to have significant to dramatic cuts in discretionary spending (FY22 levels)
- **Authorization bills anticipated:** IOOS, HABHRCA

Discussion: How stakeholder input for IOOS is collected at a regional level by RAs and IOOS works within the current networks. Additional discussion on how IOOS and RAs are involved with the new University Center for Atmospheric Research (UCAR) Center for Ocean Leadership, which is the “new” Consortium for Ocean Leadership (COL). They are now doing the convening, supporting, etc. that COL was doing. Each of the 11 RAs are members of UCAR and 3 IOOS people are on their strategic committee.

IOOS Program Office Update, Carl Gouldman

Director Carl Gouldman gave an update on IOOS Program Office activities.

- **New staff:** Maria Murray and Susan Fox hired as Regional Coordinators. Maria is assigned to AOOS.
- **NOAA FY22-26 Strategic Goals:** build a climate ready nation, make equity central, accelerate growth in an information-based blue economy. These are very related to all the things that IOOS and the RAs do.
- **FY23 budget status:** FY23 appropriations, BIL and community special projects are being administered by IOOS.
- **Inflation Reduction Act (IRA):** progressing but waiting on final stages on the allotment to NOAA (there should be \$3.3B for NOAA over 4 years). Climate ready coasts will provide funds for enabling coastal communities to prepare for extreme storms, support natural resources that sustain coastal communities, support marine fishery and marine mammal stock assessments. Trying to move these funds within the next 14-16 months.
- **OTT program:** funding decisions in April 2023, \$30M worth of requests for \$2.2M in available funds. We may get more as well.
- **NHABON:** FY23 \$3M with the goal to integrate existing assets and research efforts across NOAA into a more formal national observing network.
- **MBON:** AOOS has just received funds to continue these efforts.
- **Surface currents program:** HFR network, working to keep expanding the network and having radars online during the USCG drill.
- **NOS Bathymetry, modeling and observations:** lots of data gaps so trying to fill those in. Trying to be faster about transitioning research into operations.
- **Meetings** IOOS Fall meeting in 2024 at SCCOOS, and AOOS in 2025. IOOS advisory committee
- Thank you to AOOS, and Sheyna for all the great work

Discussion: Board discussed how the federal agencies should coordinate the BIL and IRA funding coming through to Alaska.

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Update from Alaska Congressional Delegation on Federal Funding

Matt Robinson of Murkowski office gave an update from Senator Murkowski office.

- **Senator's priorities for Congress:** climate and coastal resilience in the Arctic, emphasized the importance of climate change and funding research, and utilizing Alaska's position as an Arctic state to make the US an Arctic nation.
- Next priority is getting the Working Waterfront Framework up and running again. Priorities to develop coastal communities and fisheries in Alaska, and all those adjacent priorities, and with that making sure the research is adequately funded.

Discussion:

- Ginny: Thanks for coming, the congressional delegation takes part in the AMPF and it's a great avenue to keep people informed.
- Dee: Can you speak about the way in which Murkowski's office works with the Governor's office? Is there any effort underway with the carbon sequestration that the governor announced?
 - Matt: Murkowski wants to work with the state to make sure that their needs are identified and that they have what they need. Front and center now is salmon, and through the CDS we've worked with the state to identify priorities, and to make the appropriations process meet the needs of the state. We're also always interested in using our position in DC to get the state what they need.
- Cathy Coon: Is there any talk with the Senator about community monitoring needs for salmon? Model of collaboration could be the Backyard Buoys project.
 - She has been very engaged with tribes and making sure they have the resources they need. We are thinking hard about how we can help with the salmon issue.
- Sheyna: Backyard Buoy project description, whaling captains will be deploying these in the communities, and we're developing an app that will be helpful to hunters. This is a very short NSF project, so we are looking at how we continue it forward.
 - Matt: this is the kind of thing that Murkowski gets excited about.
 - Carl: I love this project as well, and I'm trying to figure out how we can scale this up. And we're finding that the RAs are able to be the connection with the local communities.
- Brad: Want to bring your attention to the Sikuliaq, we were not able to get a new dock funded through NSF. But when you mentioned Working Waterfronts, the dock in Seward is inadequate and it's really important to get a usable one. The NSF cooperative agreement has been extended to 2029.
 - Matt: we have been thinking about that, somebody else in the office does transportation and ports and harbors.
- Matt: Thank you all, it's really important for us that Alaska is a leader in research.

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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 discussed how using an “app” can be more expensive than a web-based mobile friendly platform. Members expressed kudos on the data portal workshop at AMSS which was helpful and well attended. Thanks to AOOS, NPRB, and Alaska Sea Grant for support of the UAF Tsunami Bowl. Also discussed upcoming community meetings. The Board also discussed the various outreach materials for the upcoming year(s).

AOOS Proposal Update

Since Sep 2022, AOOS has led one proposal and partnered on two proposals. (Spreadsheet included in Board packet.)

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. Fieldwork for all three subawards has been completed and data are now being analyzed. All the remaining subawards are on track for closeout. The December progress report was approved and the June report will be completed on time.

FY21-25 Agreement Update

Sheyna provided an update on the AOOS FY21-25 Cooperative Agreement. The Year 3 core pre-scope has been submitted and should be approved soon. The Year 3 non-core pre-scope are being put together now for submission sometime in May. The January progress report was approved and the July report will be completed on time. (Year 3 core budget included in Board packet)

2022-2023 Bipartisan Infrastructure Law (BIL) Update

Sheyna provided an update on the AOOS Years 1 & 2 of the BIL Cooperative Agreement. Year 1 was approved for period of Dec 1, 2022-Nov 30, 2023. This includes two provisions: Prov 3 (infrastructure) was for upgrades of passive acoustic moorings, ecosystem moorings, HFRs, and gliders and Prov 11 (Regional Ocean Partnership) was for community-related projects. All subawards and contracts have been executed, with the exception of the community-led program and mobile-friendly mariner’s dashboard RFP. (Years 1 and 2 budgets included in Board packet).

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Other External Awards

Sheyna provided an update on awards to AOOS, including updates for the 1) the NSF Convergence Accelerator Phase II; 2) the WWF/NPS Bering Sea Transboundary Incident Response Tool; and 3) the new award EVOSTC (Exxon Valdez Oil Spill Trustee Council) Data Management Program. (Information is provided in the Board packet.)

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

Acceptance of New Board Member and Treasurer Appointment

James Kendall has moved to New Orleans and has appointed Cathy Coon as the new BOEM representative. The Nominating Committee recommended that Cathy also be appointed as Treasurer.

- **Action item:** *Motion to accept Cathy Coon as new BOEM representative and Nominating Committee recommendation for appointment as Treasurer by Dee Williams, second by Amy Holman.*

Approval of annual micropurchase policy

The Board approved an increase to the micropurchase policy in Apr 2022. This requires an annual approval from the Board.

- **Action item:** *Motion to approve the annual micropurchase policy by Bard Moran, second by Lynn Palensky.*

Governance Committee

A Governance Committee was established in the Fall Board meeting to discuss important issues for AOOS moving forward including 501(c)(3), Alaska Native Board seats, and overall Board membership. No meetings had happened this winter, so we confirmed that the first Tuesdays of each month at 3pm will be a standing meeting time to make progress.

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

Outreach and Engagement

Sheyna and Alice led a discussion with the Board on outreach materials. (Information on proposed materials included in the Board packet). The following is a summary of what was decided:

- Monthly update to Board: shorter bullets (not long paragraphs) with a note for whom to contact if they want more info, add in upcoming events for Board to be aware of and request feedback if we are missing events, news articles, maybe consider not doing monthly update when doing newsletter.
- Three e-newsletters: but think about the months that don't stack up on other items

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- Annual Report: think about target audience and if this is necessary, think about moving to no print outs
- Consider more social media

PI planning/20-year anniversary

- Not huge support for PI meeting - seems like a waste of resources and time. Likes bringing specific PIs to Board meetings.
- May consider an agency-targeted meeting
- 20-year anniversary: we like the idea of a 21st anniversary tagged with the AOOS Fall Meeting in 2025
 - Board celebration with PIs
 - Speed dating projects
 - Maybe center around IOOS fall meeting in 2025
 - Fold into next 5-year planning - what is going on move to what is happening? What are the key issues we should focus on?

PI Updates

Donna Hauser, UAF IARC

Donna's presentation is available upon request.

- Focused on network of local observers across the local sea coast.
- Three main priority areas: support local observers, create educational opportunities for next generation, provide services & info to support local priorities
- Spring bowhead whaling in Utqiagvik. Mapping sea ice using gps and sea ice thickness with a two sled (<https://arctic-oak.org/sea-ice-data-and-reosurces>)
- Also working on a "report" of past 15 years of trail maps with notable events back to BWCA. Grateful to AOOS support.
- Amy: Do you have an ask from AOOS board to expand what's going on?
 - AOK has received large funding influx early on, getting to end of that. We have a portfolio of different projects with long-term observations with providing stipend. Need more support in getting stipend - she is writing NSF proposal right now.
 - Had a meeting with observers this past November. They asked who do they want to use the observations, they want people from community but also federal agencies to put into practice.

Tyler Hennon, UAF

Tyler's presentation is available upon request.

- Previous southeast work: CTD casts from World Ocean Database - no observations in summertime in southeast AK.
- ATA vessels given lightweight CTD and iPads. Compensated to collect regular measurements.
- ASG funded with AOOS equipment support.
- Sampling ~monthly at certain stations for ATA group
- Casts can be used to construct time series.
- AOOS giving 2 new CTDs with AOOS, 3 from Fishery fund, full proposal to Alaska Sea Grant, connect with other programs, archive data

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AOOS Updates

Jill Prewitt, Regional Ocean Partnership (ROP)

Jill gave an update on the ROP with two pots of funding (NOAA & BIL), including background of the ROP, how the funds have been spent since 2019, information on the newly formed Steering Committee, and plans for upcoming spend plans. Jill's presentation is available upon request.

Discussion:

- Amy: inexpensive 3D printed weather station - USAID - \$300-500 instrument plug and play, water level, soil, moisture, etc. Interesting concept to test or with ANSEP.
- Steve: cheap model for AIS similar for remote places
- Sheyna: weather station at Little Diomedea
- Katrina: might be good to put together a summary of how much is spent per region. Think about how we leverage this funding.

Carol Janzen, High Frequency Radars (HFRs)

Carol gave an update on the HFRs for 2023, including an update of each of the 3 Arctic, 2 Bering Strait, and 1 Cook Inlet sites. Carol's presentation is available upon request.

Thomas Farrugia, Alaska Harmful Algal Bloom Network

Thomas gave an update on the AHAB, including the scope from the first two years of funding, as well as the spend plan for year 3 to be submitted this week. Thomas's presentation is available upon request.

Discussion:

- Amy: In workshop, did you talk about how we fund long-term these HABs cruises? Other mechanism by which to do that? Instead of a big ship, what about on ROV or glider or UAV?
 - People have put it on saildrones, gliders, and even a mooring. Seth said he would make room on an ecosystem mooring.
 - What people want to know is what is happening nearshore or near people vs being offshore.
- Amy: What is depth cells are the Alexandrium cells?
 - Thomas: these cells are on the surface, but the cyst is in the seafloor.
- Rob: they have 11 IFGBs in CeNCOOS - reverse trajectories, collecting images and classifying them, running forward and backwards forecasting.
 - Thomas: They put out great info'
 - Rob: Already working through dashboard with California, so could be able to plug and play. They are on piers in CA. Have it on USGS geophysical cruises.

Rob Bochenek, Axiom Data Science

Rob Bochenek gave an update on a few of the AOOS data portal items. Rob's presentation is available upon request.

Discussion:

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- Amy: every day we crank out operational models that are creating value added...when we are looking at the ecosystem, we do one-offs. This work that they are doing is part of NOAA initiative with climate ecosystem fisheries operational models to enable resource management.

Ocean Users Round Table

- **USARC (Cheryl Rosa):** We just released the 2023-2025 goals report for arctic research in January; this comes out every 2 years. Just did AK-based releases at Arctic Encounter Symposium and Kotzebue. Field trip to Point Lay, focused on infrastructure. Not too much ocean stuff lately, but will keep us posted. Unplanned retreat in Point Lay due to weather. Had some discussions with people that wouldn't have without the weather delay.
- **USCG (Phil Thorne):** full scale in-water exercise in Nome the first week in June. Equipment deployment in Nome and Unified Command in Anchorage. Mark Everett has the lead for this. Looking forward to testing out these tools. Was supposed to be US Russia, now it is just US.
- **ADEC (Megan Kohler):** Appreciate time and opportunity.
- **MXAK (Steve White):** Putting an AIS weather stations on vessels. Plan is to install on *Medina* and *Kestrel* (State boats) and will do so on the ferry. Any opportunity to collaborate with the group, lots of people going out in the field doing lots of projects, so how do we find economy of scale.
- **UAF (Brad Moran):** Sikuliaq was not recompeted, so it will be through 2029. Pretty focused on getting a shoreside facility (new dock) in Seward. Two new faculty coming onboard in July, both physical oceanographers. One offshore and one riverine. Active recruiting for a marine policy professor.
- **NOAA (Amy Holman):** Alaska TV Weather program that NWS runs every day. NPR is going to stop supporting this before Jul 30. We are trying to figure out a way to work around this. It gets out this way to people who don't have internet, so trying to figure this out. Will have to let everyone know this is going to stop. The NWS is asking for help to get the word out to people. This is a big deal. Also if you have any creative solutions on this, please let her know. NOAA's FY24 budget has been released. NOAA's IRA has not been released yet. So the \$2B that Carl talked about has not been released once OMB has released the spend plan. Also a lot of national interests with a lot of field seasons.
- **BOEM (Cathy Coon):** 1) got to meet Federal agencies working with USAON (Sandy Starkweather & Hazel Shapiro) to promote shared observing assets. They are tying into societal benefit areas, with focus on risk hazards and mitigation. Sandy has a good presentation on societal impacts, would be a good thing to share with the group. 2) BOEM has partnered with education groups and are having students build these small-scale ocean drifters deploying out of Homer and Kaktovik. The ocean drifters transmit via satellite with ocean information. Low dollar point to engage with STEM. 3) Sit with Danielle Dickson and Jackie Grebmeier - hosting a webinar on Apr 19 through IARPC on salmon. Hoping that we have community folks from Bristol Bay to start a dialogue and

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what's important to monitor for salmon declines. She also talked to Betsy Baker last week at AES compiling a list of all the salmon initiatives going on. 4) Engaged with Arctic Council with approved projects going forward. Norway will take chairmanship peacefully in May. Planning a conference with Ecosystem-Based Management with Norway to come up with keynote speakers, IK holders, etc.

- **Hilcorp (Chuck Wheat):** Hilcorp hosting shippers drill May 15-18 in Valdez with UCGS taking the lead. Hilcorp is involved in a number of alternative energy projects: we are actively trying to work with research groups for a pilot project in Cook Inlet for tidal project this summer. Maybe hanging off the platform - working with a few researchers.
- **ASG (Ginny Eckert):** Loves connecting ideas. Next week AMA is hosting a webinar on communities working within the existing system for managed retreat exercise to share success across regions. Also hosting an invasive green crab workshop with ADFG. Training folks from different communities on how to detect green crabs. Setup an observing network with volunteers. Leigh Lubin has been working with AOOS and with the tourism industry to do more needs assessment. Interested in how ASG can work more with this industry.
- **NPRB (Lynn Palensky):** We do need to coordinate more. NPRB Board meeting in a couple weeks, getting the blessing to move forward with pre-proposal RFP for next IERP in northern Bering Sea. Released this fall. May ask to share this announcement. Making advances on arctic marine museum exhibit. Working on MOU with the Anchorage Museum to present Arctic research, what it would be like on the Sikuliaq, always looking for partners. We also put together a few short videos on Arctic IERP.
- **PWSSC (Katrina Hoffman):** Prince William Sound Stewardship Foundation is hosting a 1-day symposium on May 16. Talking about landslide risk, pretty significant in PWS. Tribal entities in natural resource management, specially in marine mammal take. Scott Pegau will give talk, as well as other federal agencies (<https://www.princewilliamsound.org/2023nhs>). PWSSC been working with other local partners on histories, vulnerability, and community hazard mitigation programs. These are a wide diverse group of stakeholders to collaborate on proposals to continue to advance resilience. Hopefully some funding will come through. The first week of June, OSRI has been funding development of flame throwing jet ski. Herder/burner project - working with tactical electronic groups out of OK with military projects with a flame throwing jet ski with remote control to ignite herder. Field test Poker Flats. Saturday June 10 is Copper River Nouveau. New facilities are moved in - still working on heater system. Looking forward to getting this going. Field season is starting!!

- **Action Item:** Motion to adjourn the Board meeting Cheryl Rosa, second Steve White

Adjournment at 5:00 pm.