

Board Members Attending: Larry Alade, Nicole Bartlett, Todd Callaghan, Pam DiBona, Diane Foster, Janet Freedman, Jason Goldstein, Jon Grant, Regina Lyons, Rhonda Moniz, Todd Morrison, Kevin O'Brien, Andy Pershing, Tom Taylor, Dave Townsend, John Trowbridge, Phil Trowbridge, Dave Ullman, Chris Williams, and Carl Wilson

Other Attendees: Rob Cardeiro, Carl Gouldman, Jake Kritzer, Julianna Mullen, Jackie Motyka, Josie Quintrell, Tom Shyka, Emily Silva, and Oriana Villar

Approval of the Minutes

The March 2021 board meeting minutes had a few grammatical edits and a suggestion to include a list of meeting action items. Those changes were made to the minutes. Todd Callaghan motioned to approve the updated minutes, seconded by Todd Morrison. The board meeting minutes from March 9, 2021, were unanimously approved.

IOOS Program Office Update

Carl Gouldman provided the update for the IOOS Program Office (PO). Carl reviewed the IOOS PO priorities which will focus on continuing sustained delivery of IOOS services everyday to meet customer needs and align, inform, and contribute to coastal resilience and climate services as plans take shape. IOOS Reauthorization Act was passed at the end of 2020. Carl reviewed the presidential budget requests, appropriations levels, and enacted budgets for the past eleven years, showing increases over the years, and then reviewed the breakdown of the IOOS regional line and how funds are distributed. Diversity, Equity, and Inclusion (DEI) is a priority for IOOS, NOAA, and NOS. The IOOS PO will be working on DEI with all of the regions and will match Regional Association (RA) funding to build initiatives within the regions. The regional awards are being finalized. The NOAA blue book should be out by next week, which is a summary of the NOAA budgets, following that the congressional budget justification should be available.

IOOS Association Update

Josie Quintrell provided the IOOS Association (IA) update. The IA has updated their strategic plan and would like to increase funding to IOOS by 100% as a long-term goal. The appropriations request this year has been the largest to date. The request included an increase to base funding for the regions and added streamlined observations to address resilience and coastal climate observations, in addition to glider and high frequency radar (HFR) funding. The president's budget came out last Friday and NOAA's budget is up 25%. The National Centers for Coastal Ocean Science (NCCOS) has funded research, technology, and forecast development for monitoring harmful algal blooms (HABs). Funding for HABs research and monitoring was mostly short-term so NCCOS will be working with IOOS to establish sustained funding for long term observations and forecasting. Pilot projects have started in a few of the RAs and the Association is looking to increase funding to support expansion to other regions. The IA will also be making the infrastructure bill a priority as more information is provided. The coordinated research and monitoring act of 2020 was passed. Climate is one of four priorities for the new administration, so the IA will keep an eye out for key opportunities. The IA will be publishing a white paper, holding technical workshops, and developing a communication plan to increase awareness of the IA and RAs. Like the IOOS PO, DEI is a priority for the IA. The IA board meeting will be held next week and the second Caraid award will be presented. The fall meeting will be in-person in DC.

Board Discussion

NERACOOS is looking for feedback from the board on the next five-year IOOS funding award while waiting for formal approval of the funding amount from IOOS. Key goals when

deciding on final sub-awardees are to keep NERACOOS whole, sustain effective components, and add new work selectively and strategically. Comments from the board:

- Wind energy involvement would be a great opportunity for NERACOOS to participate in critical observations and create necessary data products.
- Rhonda's work is involved with satellite telemetry, and this could provide a useful connection for NERACOOS.
- There is no match requirement for sub-awardees but leveraging other funding opportunities is always beneficial.
- Fundraising should be a priority for NERACOOS and the board. The projects that were not funded under the original \$6M budget would be great targets for fundraising campaigns.
- Flood-risk modeling – community / state-funded cost-sharing opportunities.

NERACOOS Update

Jake Kritzer, Tom Shyka, and Jackie Motyka provided the update for NERACOOS. This update focuses on three topics with more detail, rather than an update on every NERACOOS project and activity quickly. The latter will be covered in email updates in between board meetings.

Jake updated the board on proposed NERACOOS planning and strategic processes. Three levels to this process:

- Master plan
 - High level
 - Useful for marketing and communications
 - Ten-year duration
- Operational plan
 - Inventory of system components
 - Used for budget allocations and fundraising decisions.
 - Five-year duration
- Strategic plan
 - Bridge between the master plan and operational plan
 - Developed with external support, board, and stakeholder input.
 - Three-year duration

Jake also shared a proposed timeline of activities for the components of these three plans. Board comments:

- Clearer distinction between operational and strategic plans.
 - Operational – specific assets, what they are doing, where they are observing.
 - How to implement strategic plan.
 - Strategic – how to make the system better, gaps, etc.
 - Why are we doing this work, what is the change we want to see.
- Include situational analysis in one of these plans.
- Build in support for outside marketing help.
- How the plans come together or are defined may evolve over time.

Tom updated the board on NERACOOS engagement with the offshore wind sector which has been increasing over the last several years. Along with engagement with wind industry,

NERACOOS has also been collaborating with regional partners such as Northeast Regional Ocean Council (NROC) and the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) and the IOOS PO. NERACOOS key activities:

- Partnership with Mayflower Wind to share their data through our Mariner's Dashboard.
- Ongoing engagement with Orsted.
- Wind Energy Area (WEA) observing system concept paper.
 - Key for navigational safety, observing and detecting ecosystem change, and helping to improve models in the WEA.
- Two letters of intent (LOI) submitted to NE Sea Grant Consortium opportunities,
 - Funded by Sea Grant, Northeast Fisheries Science Center (NEFSC), and the Department of Energy.
- UMassD to participate in Orsted sponsored model benchmarking exercise.
- Development of Blue Economy engagement position to be shared with NH Sea Grant.
 - Offshore wind, aquaculture, marine transportation, fishing, etc.

Jackie updated the board on Continuous Plankton Recorder (CPR) data. This effort expands the North Atlantic survey data that was collected from 1962 to 2017. NEFSC recently renewed these surveys in the Gulf of Maine and would like to expand into the mid-Atlantic eventually. CPR data is currently hosted by the Marine Biological Association in the UK. NEFSC and NERACOOS are working on making this data more accessible. Plans for integrating the data into the NERACOOS system:

- Archive the data at NCEI and integrate into the NERACOOS ERDDAP system.
- Serve as a repository for data or tools related to plankton in the region.
- Develop products consistent with NERACOOS mission as funding allows.

This effort also aligns with the Marine Biodiversity Observation Network MBON mission, a key function of which is to provide new observations in the Gulf of Maine and to integrate historical plankton data to create models to predict locations of right whales.

Executive Committee Update

John Trowbridge provided the Executive Committee Update. John has been in conversation with the Northeast Academic Consortium (NEAC), NROC, and Sea Grant directors. NROC and NEAC are both invited to nominate directors to the board, per the by-laws. John is working with NEAC members to become a more active body. Sea Grant directors have also expressed interest in participating more in the board again following a decision to step back a few years ago. The Executive Committee has been meeting regularly and a main focus now is the annual performance reviews for the staff and the executive director.

Nominating Committee Update

Jason Goldstein provided the Nomination Committee update. The final slate of nominations is due to Rhonda Moniz, Secretary, by October 22, 2021, and to the full board by November 23, 2021. There are five vacant seats at the moment, and seven directors' terms will be ending this December leaving a potential twelve seats to fill, though it is not a requirement to fill every seat. Please email Emily Silva for the current slate of nominations. Directors are also permitted to have alternates, who would be nominated and voted on just as a director is.

The nomination committee held a meeting with the full committee and Larry Alade, Diane Foster, Todd Morrison, Pam DiBona, Jake Kritzer, and Emily Silva to discuss broadening participation on the board and opportunities for student participation. It was decided that NEAC would be a good starting point to gauge student interest on the board before expanding to other academic institutions.

Finance Committee

Rob Cardeiro provided the update for the Finance Committee. The finance report and annotated audited financial statements were provided to the board prior to this meeting. No-cost extensions were granted for the FY16 award, Coastal and Ocean Modeling Testbed (COMT), Ocean Acidification (OA) Thresholds, and the Office of Naval Research (ONR) Shark Tagging projects. Audit takeaways:

- No findings, issues, or problems identified during the audit.
- Positive opinion – we presented the numbers fairly and in accordance with generally accepted accounting principles.
- Year-end net assets decreased by \$33K.
- Our internal controls within our financial systems are adequate.

Rob provided a brief review of the NERACOOS financial status, which included what is in the NERACOOS bank account, the monthly expenditures, and indirect rate. Priorities for the Finance Committee:

- Continue to email current finance report and provide time for Q&A.
- Provide higher-level look at the finances.
- The August board meeting will focus on the coming fiscal year budget.
- The December board meeting will briefly look at the previous fiscal year and present a NERACOOS Finances tutorial.
- The first and second board meetings of 2022 will provide the financial picture tied to the programmatic “deeper dives”.

For more details on these topics, or if you have other questions, please email Rob.

Action Items

- NERACOOS will create and share guidance for crediting NERACOOS data when it is shared by others.
- The Nominating Committee will schedule another call to discuss and implement goals.
- Feedback welcome from board on new format for the NEARCSOOS update.

Next Board Meeting

Teleconference on August 19, 2021.

Todd Callaghan motioned to adjourn the meeting, seconded by Todd Morrison. The meeting was adjourned at 11:59 AM.