

HIGHLIGHTS

AOOS ED Search – AOOS is getting closer to hiring a new Executive Director to replace Molly in January. The AOOS Executive Committee met October 26 to review the recommendation of the Search Committee. Stay tuned for more news soon. And remember, Molly isn't totally retiring – she'll be stepping down as ED but continue serving for a period of time as AOOS Senior Advisor.

Sustaining Ocean Observations workshop – Molly co-chaired 3 days of virtual meetings Sept 16-18 for the workshop sponsored by the National Academy of Sciences' Ocean Studies Board. The workshop consisted of several keynotes, panel presentations, and community discussion, and focused on: need for developing a more comprehensive initiative to communicate the value of ocean observations; the challenges of existing governance structures and options for new or enhanced structures; and models for sustained funding. A final report summarizing the presentations and discussion will be available in December.

UNDOS - Lots of activity to report here. Molly is on the international task force hosted by the Danish Centre for Marine Research in collaboration with the Intergovernmental Oceanographic Commission (IOC) preparing for development of an [Arctic Ocean Action Plan](#) as part of the Un Decade of the Ocean (UNDOS): "Turning the Ocean We Have into the Ocean We Want". Molly is also co-chair of one of the 7 working groups – the Data Management WG - that are helping craft the plan. The first working group meeting was held October 23, and the next one is slated for Nov 5. The US has also stood up a US Committee for the Ocean Decade, which is hosted by the National Academy of Sciences' Ocean Studies Board. AOOS Board member and UAF CFOS Dean Brad Moran is on that committee, which held a briefing on October 16. AOOS has applied for – and been accepted as – an Ocean Nexus organization, which means we can contribute to and disseminate news about US – and Alaska - Ocean Decade news and activities. The US Committee has also issued a call for submission of "[ocean shots](#)", defined as an ambitious, transformational research concept that draws inspiration and expertise from multiple disciplines and fundamentally advances ocean science for sustainable development.

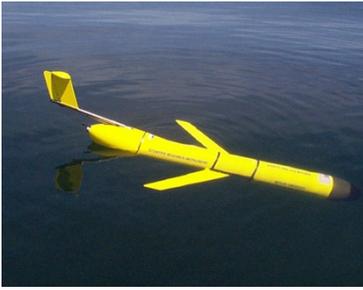
ADMINISTRATIVE

Year 5 program gets final approval - The final year 5 descope was approved by NOAA Grants Management Division and all subawards are completed and work is underway. Again, thanks to Holly and Tara Miller at the ASLC for all the work they put into this, and to Debra Esty and Oriana Villar for their prompt review at the IOOS PO end.

Proposal planning & development continues – AOOS staff continue to work on all of the components for our FY21-26 proposal submission to the IOOS program. We should have a final draft to circulate to the AOOS Board in about 2 weeks. We had hoped for submission prior to Thanksgiving, but that will likely slip to early December (the deadline is actually Dec. 30.)

OBSERVATIONS

CDIP Wave Buoy Updates: Lower Cook Inlet (LCI) buoy redeployed for a 2nd time in 2020 – After a complicated buoy turnaround in the summer of 2020 (when a new LCI buoy and mooring deployed in mid-August was cut loose less than 10 days after deployment, presumably by a passing vessel), the LCI wave and surface current buoy was successfully redeployed Oct 12 by Zech Bennet and crew of C&C Diving and Salvage (Homer, AK) with assistance from CDIP in San Diego, CA. The buoy remains operational and data can be viewed on the AOOS data portal [LCI station page](#).



Whale glider recovered after 28 day mission – Despite COVID travel restrictions, the UAF glider team coordinated a successful deployment and recovery for the 2020 Chukchi Sea glider transect. The Norseman 2 deployed the Chukchi Sea glider on Sep 12 for its 8th deployment since 2013, and recently recovered the glider as they left the northern Chukchi Sea in mid-October at the end of the recent DBO/CEO/AMBON cruise. The glider made it all the way to Cape Lisburne and completed a 28 day at-sea mission. It was recovered during a massive storm, right as ice was moving into the western Beaufort Sea. Many thanks to the crew of the Norseman 2 for helping make this a

successful glider mission in 2020, demonstrating team work at its best in Alaska. The glider is now on its way to UAF where internally recorded data not transmitted real time will be uploaded for processing and analysis.

Chukchi Sea Ecosystem Observatory (CEO) mooring turnaround a success - The Norseman 2 DBO/CEO/AMBON cruise successfully recovered and re-deployed the CEO moorings near Hanna Shoal in October.

HF Radar 2020 Status Update - The HF Radar field season has been extremely challenging due to COVID travel restrictions. AOOS currently supports the operation of 3 HF Radar on the western North Slope (Wainwright, Point Barrow, and Cape Simpson), and 2 Bering Strait trial radar deployments in Wales and Shishmaref. The site in Wainwright ran all winter, and remained operational with no need for a site visit. With the help of UIC Science in Utqiagvik, the Point Barrow and Cape Simpson HF radars were brought online this summer. The Cape Simpson radar station is having issues with the satellite internet system, though it is thought the site is running fine, just not transmitting data back in real time. The fix requires a purchase and commission of a new modem, and UAF is working with UIC Science to see if a remote installation is possible this year. In the Bering Strait, Michael Ahkinga Sr. from Wales helped to get the site operational. Unfortunately, Wales has internet issues, so getting real time data has been intermittent. When travel restrictions lift, the UAF HF Radar crew will install a satellite internet system to bypass the wired internet limitations. The Shishmaref site is located near teacher housing and was using electricity from there, but the power source was found to be unreliable. Bering Strait School District is now constructing new teacher housing where they are including a dedicated power source for the HF Radar with its own breaker, which is very generous and helpful. The operational status of this radar is still standing by for this new power source.

IOOS

IOOS Association fall meeting - Molly and AOOS Board chair Katrina Hoffman joined other IOOS Regional association directors and RA board members at the association's fall meeting October 9. We received updates on funding, legislation and policy from IOOS Assoc ED Josie Quintrell and from IOOS Program Office director Carl Gouldman, and continued work on the association's strategic plan.

IOOS FAC - Molly participated in the October 19 administrative meeting of the IOOS Federal Advisory Committee, which reviewed current membership, as well as the recommendations from the summer meeting.

CONFERENCES/MEETINGS/PRESENTATIONS

AMSS Planning – Molly and Holly are on the planning team for the 2021 AK Marine Science Symposium, which will be held virtually January 26-28. Abstracts for oral and poster presentations are now being reviewed. Registration will open next week (and it will be free), as well as a call for panels/workshops.

PICES 2020 Monitor Technical Meeting Session – Carol presented the 2020 AOOS update report to the PICES Monitoring Committee on Sept 16. The PICES meeting was held virtually in 2020 due to COVID which enabled more participation by individual contributors like AOOS. Normally, AOOS provides a presentation to this committee but does not deliver it in person.

HSRP - Molly gave public comment during the Sept 23 meeting of NOAA's Hydrographic Services Review Panel in support of the panel's review and comments on Alaska's Coastal Mapping Strategy.

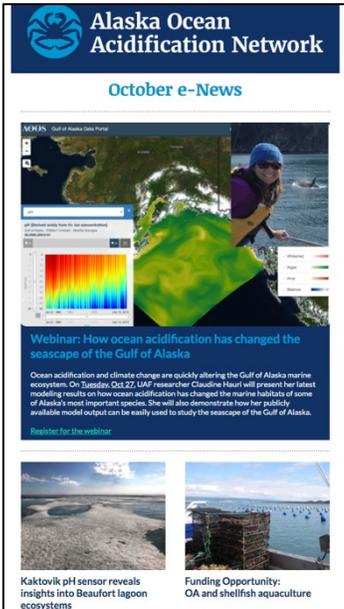
ADAC AMSM Project Support – Carol participated in the Arctic Domain Awareness Center (ADAC) project "Arctic Maritime Spill Response Modeling" meeting on Sept 21 to provide information on AOOS observing and data assets in the Arctic. A virtual workshop for this project is scheduled for November 16.



ACCAP Advisory Committee – As part of the committee, Molly reviewed and provided comments on ACCAP’s draft strategic plan, which is being used to guide their next NOAA proposal as part of the Regional Integrated Sciences and Assessments Program. The committee met to review that draft on October 23.

Aleutian Islands Waterways Safety Committee – Jill attended the Committee’s annual meeting on Oct 21. She gave a short public comment on the work of the Bering Region Ocean Data Sharing Initiative, focusing on the Bering Strait emergency response tool being developed in partnership with WWF Arctic and Russia programs, and how that tool could be expanded to include areas of interest to the Committee.

Exxon Valdez Oil Spill Trustee Council (EVOSTC) Fall Meeting – Carol attend the annual EVOSTC fall meeting on Oct 14. This meeting was held virtually, was well attended, and covered planning discussions for the next 10 years of the EVOSTC programs.



COLLABORATIONS

AHAB contribution to NOAA IEAs – AOS coordinated the submission of the first-ever section on Harmful Algal Blooms (HABS) in the Ecosystem Status Report of the North Pacific Fisheries Management Council. The section summarized HAB conditions and monitoring efforts for the state in 2020 and will be listed in the “Noteworthy” section. HABS will be included in the report from here on out.

Alaska Water Level Watch Steering Committee Meeting – Carol is on the Alaska Water Level Watch (AWLW) Steering Committee, which met on Oct 2 to finalize the AWLW Guidance Plan and to establish milestones for the collaboration working group to meet by 2025. Priority goals include establishing tidal datums at key communities that meet NOAA authoritative standards, and establishing water level sensors at gap locations that also meet NOAA specifications to support building a statewide AK VDATUM. A 10-year strategy for mapping the coast of Alaska, a link to the AWLW Data Portal and other programmatic updates are available on the [AWLW Website](#).

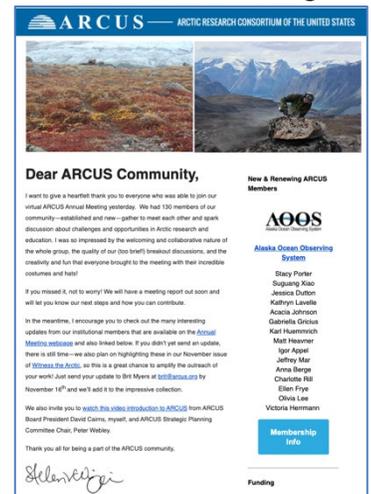
Alaska Ocean Acidification Network –The network is initiating conversations related to municipal engagement and held a conversation with the Anchorage Muni climate program on Oct 13. Another call was held with additional communities across the state on Oct 30. The [October OA eNews](#) circulated Oct 23 and covered findings from 1 year of pH data in the Beaufort, Gulf of Alaska modeling and conditions, an OA funding opportunity on shellfish and aquaculture, OA experiments that can be done at home, resources for local government actions on OA, and a new “good news” corner.

NOAA OA Program Review – Darcy and Molly participated in an external review of NOAA’s Ocean Acidification Program Sept 29-30. Molly provided input on the scientific approach and Darcy was part of the stakeholder engagement group.

ARCUS annual meeting – The Arctic Research Consortium of the US held its annual meeting virtually Oct 29. Molly facilitated one of the breakout groups discussing interdisciplinary research and team building.

Commonwealth North Arctic Policy Study Group – Commonwealth North is a non-partisan group based in Anchorage whose mission is to educate Alaskans on significant policy issues and help develop solutions. Former Lt. Gov Mead Treadwell is leading a group developing an Arctic Policy. Over the past few months they have been hosting a variety of sessions on Alaska Arctic issues and needs including national security, transportation infrastructure, energy, etc. Molly has been participating to make the case for including a broader variety of needs including ocean observations for maritime safety, responses to coastal erosion and flooding, and changing ecosystems that affect food security, subsistence economies and living marine resources.

NOAA Regional Collaboration Team Meeting – Hosted by Team Lead Bob Foy and Alaska coordinator Amy Holman, this monthly meeting brings together representatives of NOAA line offices working in Alaska, as well as such NOAA partners



as AOOS, AK Sea Grant, Kachemak Bay NERRS, etc. The Oct 7 meeting highlighted updates on an inclusion and diversity working group, as well as enhancements to Cook Inlet Operational Forecast model.

Bering Science – The “[Bering Science: Fall 2020 Bering Region Ocean Update – summer science highlights](#)” report was released on October 15. With a team facilitated by a partnership between AOOS and UAF/IARC, Jill worked with agency and university scientists from across the region to compile information on recent research results and observations during this past summer in the Bering Sea. This was a challenging year for conducting research in Alaska, with many surveys and projects delayed or cancelled due to the covid-19 pandemic. However, the report highlights other ways agencies were able to gather information, such as the survey of walleye pollock conducted by Saildrones (pg. 3), and phytoplankton estimation from satellite images. The report also gives updates on other research that was conducted, including research on tracking lost crab pots, satellite tagging of crab and bottom trawl surveys for crab.

DATA MANAGEMENT

National IOOS DMAC meeting – The 2020 DMAC Virtual Annual Meeting was held Oct 13 - 15. IOOS received over 140 registrations for this year’s virtual meeting, and average daily attendance on the videoconference numbered 100, making this the largest DMAC meeting of all time! The AOOS data management team at Axiom Data Science presented on recent projects and led a handful of breakout sessions. Kyle Wilcox reported out on QARTOD Implementation and `ioos_qc` Improvements, in addition to co-hosting a presentation with the IOOS Program Office on the history and evolution of DMAC services to meet user needs. Jessica Austin presented on ERDDAP Dataset monitoring and alerts using Prometheus and Grafana, which spotlighted both AOOS and CeNCOOS data services. Additionally, Jessica gave a live demonstration of the new NSF Ocean Observatories Initiative (OOI)’s [Data Explorer](#), developed by Axiom, and discussed applying IOOS DMAC techniques to those data services. Axiom also co-hosted two breakout sessions: *SanctSound and Soundscapes Data Management* (Rob Bochenek) and *Data management techniques and metadata standards for audio and video datasets* (Kyle Wilcox).

Axiom Data Science is hiring - The two positions are described below. Please check the position descriptions at <https://axiomdatascience.com/jobs/>. Applications are due by November 20, 2020.

Software Engineer (full-stack)

We are looking for multiple full-stack software engineers to join our growing team. This position will work within a distributed team of engineers and data analysts on both front-end and back-end systems to increase the accessibility, reuse, and impact of scientific data. Axiom is currently 100% remote due to COVID-19 concerns. Post-pandemic position location is flexible and can be remote but we would prefer someone close to an office or in the southeast US. [Apply here](#).

Grants and Contracts Manager

We are looking for a new team member to manage our grants and contracts, assist with the financial and accounting systems, and improve our external communication with partners and funders. Axiom is currently 100% remote due to COVID-19 concerns. Post-pandemic position location will be in the Axiom headquarters office in Anchorage, AK. This position is being offered as part-time or full-time, depending on the interest of the successful applicant. [Appy here](#).

ENGAGEMENT METRICS

Audience Name	Type of Presentation	# of people
PICES Monitor Technical meeting	Oral presentations - Virtual	30+
OA Municipal engagement	OA presentation + dialogue	12
SACNAS conference	OA presentation lightning talk	6
Aleutian Islands Waterways Safety Committee	Short public comment/ presentation	25
IOOS DMAC annual meeting	Presentations + hosting breakouts	140

UPCOMING EVENTS

- Nov 5 UNDOS Arctic WG meetings 5-7 am (Molly)
- Nov 5 AOOS Diversity & Inclusion working group (Darcy, Molly, AOOS Board & others)
- Nov 6 OA Network communications working group (Darcy)
- Nov 9 AOOS non-profit status WG (Molly, Holly & some AOOS Board members)
- Nov 10 AK Water Level Watch data portal presentation to other IOOS RAs 10 am (Molly, Carol & Axiom)
- Nov 12 AMSS Abstract Review Committee Meeting (Carol)
- Nov 16 ADAC Arctic Maritime Spill Response Modeling project workshop (Carol & Molly)
- Nov 17 NESDIS Workshop on Geospatial Needs (Carol)
- Nov 17-18 Ecosystem Sciences Management WG fall meeting (Molly)
- Nov 17-19 Northern Connections – Bridging Indigenous Knowledge & Observations workshop (Jilly & Molly)
- Nov 17-19 EVOSTC GWA and HRM Meeting Week – Virtual (Carol, Stacey)
- Nov 18 AK Marine Policy Forum (Molly & Holly)
- Dec 4 CIRCAC Board (Molly)
- Dec 9 AK Sea Grant Advisory Committee (Molly)

Molly McCammon, Carol Janzen, Holly Kent, Darcy Dugan, Jill Prewitt, and our data team at Axiom Data Science