



Alaska Ocean Observing System
1007 W. Third Avenue, Suite 100
Anchorage, AK 99501
907.644.6703 www.aos.org

AOS Board Meeting
May 22, 2019
Meeting Summary Prepared by Holly Kent

Board members present: Sara Longan (ADNR), Doug Vincent-Lang (ADF&G), Dee Williams (USGS), Jim Kendall (BOEM), Brad Moran (UAF), Betsy Baker (NPRB), Katrina Hoffman (PWSSC), Cheryl Rosa (USARC), Ed Page (MXAK), Theresa Peterson (NPFMC), Bill Britt (Hilcorp)

Board members present by phone for all or part of meeting: Paul Webb (USCG), Heather Brandon (AK Sea Grant), Margaret Williams (WWF), Lynn Kent (for Jason Brune, ADEC), Tara Riemer (ASLC)

AOS staff present: Molly McCammon, Carol Janzen, Holly Kent, Darcy Dugan, Kayla Schommer

Guests present: Peter Murphy (NOAA), Jeremy Kasper (UAF)

Guests present by phone: Josie Quintrell (IOOSAssoc), Carl Gouldman (IOOS), Becky Smyth (NOAA OCM), Rachel Potter (UAF)

Meeting called to order at 8:35 am at the USGS Leslie Holland-Bartels conference room in Anchorage by AOS Board Chair Katrina Hoffman.

Adoption of Agenda

Action Item: Draft meeting agenda approved unanimously. *Motion by Baker, second by Britt.*

Adoption of Board Meeting Summaries

Action Item: Board meeting summaries from general board meeting November 2, 2018 and executive committee meetings March 1, 2019 and April 20, 2019 approved unanimously. *Motion by D. Williams, second by Kendall.*

Update on AOS activities by AOS Executive Director Molly McCammon

Molly McCammon provided an overview of recent and upcoming AOS activities and participation in state, national and international level initiatives.

Alaska Activities:

- Government shutdown
- AGU: Bering Strait Response, AK chapter Natl Climate Assess
- ADAC/NAS AIS project presentations, ADAC annual mtg
- AMSS: organizing team,
- AFE: booth/display table
- Sea Grant site review April 9, oil spill conference Feb 20-21
- AK Harmful Algal Bloom Network: MERHAB proposal submitted, HAB workshop Feb 15
- AK OA Network: Pacific Marine Expo, AMSS, AFE, Juneau presentation Feb 20
- AK Water Level Watch: network meeting in April, tiered data level portal in development
- AK Coastal Mapping strategy underway
- New projects: Kodiak buoy, HF radars in Bering Strait, HIOMAS model for ADAC, Western AK Storm Models project

National/International Activities:

- IARPC Environmental Intelligence Collaboration Team co-lead

- Consortium for Ocean Leadership: trustee & public policy forum: moderated ocean policy present panel March 13
- Testimony at House WOW subcommittee: May 8
- NOAA Science Advisory Board – Ecosystem Services Management Working Group focusing on “New technologies to support fishery stock assessments”

Upcoming Activities:

- IOOS Advisory committee: meet June 3-4 in DC (later cancelled)
- Ocean Obs 19: Honolulu, September 2019, emphasis on stakeholder engagement, societal needs: white papers submitted, special session on Arctic

Update on IOOS Association activities by Josie Quintrell, Executive Director, IOOS Association

Josie gave an overview of the IOOS Association’s role and then updates on congressional outreach, upcoming appropriations and legislation, and other IOOSA activities.

Update on IOOS Program Office activities by Carl Gouldman, Director, IOOS Program Office

Carl gave a brief overview of the IOOS Program Office’s role, a historical perspective on IOOS funding, program highlights from the past year, and the upcoming focus on gliders.

Regional Ocean Partnership funding by Carl Gouldman and Becky Smyth (NOAA OCM)

Carl and Becky introduced new funding coming from a FY2019 congressional appropriation “to enhance capacity for sharing and integration of Federal and non-Federal data in support of regional coastal, ocean, and Great Lakes management priorities.”. This one-year funding will go to AOOOS as the sole partner for the Alaska Region and is expected to be \$166,262 and should be available in July of this year. The board discussed possible uses of this funding and decided to form a working group to develop options in June with a final decision to be made by the executive committee in July. Working group members are:

- Ed Page
- Jim Kendall
- Bill Britt
- Dee Williams
- Sara Longan

AOOOS Budget Review, Year 4 proposed Budget, and Proposed Year 4 Budget Additions

Molly presented a review of the current budget to expenditures with some discussion by the board. Molly then presented the Proposed Year 4 core budget for approval (attached). \$520K in confirmed additions to the year 4 budget and \$256K in expected year 4 budget additions were introduced for approval (attached). These include new funding for additional HF radars and gliders. Molly discussed the staff call for mini-proposals for potential projects to fund when funds are available for reallocation or new funding sources are available. AOOOS received 20 proposals and ranked 9 viable options. The board was given copies of the 9 ranked proposals for review and consideration. A discussion ensued on the ranking process and individual proposals. Staff will take additional time to get more information on some of the proposals and bring them to the executive committee for a final decision.

Action Item: The Proposed Year 4 core budget and Year 4 budget additions were unanimously approved and adopted by the board. *Motion by Vincent-Lang, second by D. Williams.*

Discussion on Preparing for FY21-25 Cooperative Agreement lead by Molly McCammon

Molly led a discussion on the upcoming Federal Funding Opportunity (FFO) for the FY21-25 Cooperative Agreement with NOAA. The discussion included a review of the current 5-year strategic plan, progress to date on that plan, and a staff-proposed schedule for preparing the proposal. Molly talked about the staff approach to stakeholder engagement in preparation for the proposal to include workshops on the status

of ocean observing in Prince William Sound 10 years after the Prince William Sound Field Experiment in 2009, ecosystems and fisheries, and Marine Debris followed by an assessment of recommendations from these workshops and development of potential projects to address those recommendations. Staff will also be developing a process for reviewing existing AOS projects for consideration of future funding.

Executive Director FY 19 draft Performance Objectives/Work Plan

Molly presented her draft work plan for FY19 which includes developing recommendations for restructuring the Data Management Advisory Committee (DMAC) roles and responsibilities, reorganizing AOS under its own non-profit status and finding alternative solutions to replace the fiscal administrative functions that the Alaska SeaLife Center now performs for AOS. This fall will be the 15-year anniversary for AOS, and staff are working on development of a 15 year accomplishments report.

Action Item: The Executive Director Performance Objectives/Work Plan was unanimously approved and adopted by the board. *Motion by Peterson, second by Rosa.*

Marine Debris in Alaska - Possible Action Plan & Workshop by Peter Murphy, NOAA Pacific Marine Debris Lead

Peter gave a presentation on several aspects of marine debris including a working definition, NOAA's role as the federal lead for marine debris, the different types of marine debris, the current status of Alaska's beaches, and the efforts on eliminating marine debris here. NOAA has worked with other states to develop a marine debris action plan and would like to move in this direction for Alaska. Peter has begun working with AOS to develop an approach that would capture community knowledge, focus on common priorities, then translate and communicate to a larger group through a workshop co-hosted by AOS and NOAA and tentatively planned for winter 2020.

Enhancing Ecosystem Studies

Molly led a discussion on this topic, including:

- What is AOS' role?
- How do we enhance our current activities, especially in relation to fisheries?
- How do we support partner goals, especially agency management?
- What are USARC and NPRB thinking and how can we collaborate?
- How does this tie in with Ecosystems Status Report/indicators project, a State of Alaska's Coasts and Oceans Report and the upcoming Regional Ocean Data funding?

Cheryl Rosa (USARC) discussed the absence of data for the Bering Strait and Beaufort Sea regions and USARC's development of a needs statement for the Arctic, including the Bering Sea.

Betsy Baker (NPRB) discussed reviewing the AOS Research Workspace to see what data exists and how it is being used, especially long-term datasets, to determine essential ocean variables. Additionally, the IOOS Mooring plan should be reviewed. Ultimately, observations and synthesis must lead to solutions.

Program Briefings

Presentations were given on these AOS programs:

- BOEM Wave Project & Beaufort Coastal Long-Term Ecological Reserve by Jeremy Kasper, UAF
- HAB workshop in May 2019 by Kayla Schommer, AOS Alaska Sea Grant Fellow
- UAF CFOS activities by Rachel Potter, UAF

Ocean Observing Roundtable

Board members and guests shared current news and upcoming events.

The meeting adjourned at 4:00pm.

H2400 FY2016-2020

	FY2016	FY2016	FY2017	FY2017	FY2018	FY2018	FY2019	FY2019
	Year 1 Descope	Year 1 revised 2018	Year 2 Descope	Year 2 Descope revised 2018	Year 3 Descope	Year 3 Descope revised 2019	Year 4 Original	Year 4 Proposed Descope
a. Personnel								
PI (McCammon)	145,060		149,410	149,410	153,000	152,669	158,509	156,780
Program Coordinator (Kent)	70,000		72,100	72,100	76,000	75,668	67,540	77,250
Deputy/Operations Director (Janzen)	103,000		106,090	106,090	111,500	111,169	112,551	114,800
Program Manager (Dugan)	20,400		42,024	42,024	43,350	43,350	44,583	44,640
Total Personnel	338,460	303,460	369,624	369,624	383,850	382,856	383,182	393,470
b. Fringe Benefits: PI @ 16%, others @ 28%								
PI (McCammon)	23,210	23,210	24,138		24,480		25,857	25,085
Program Coordinator (Kent)	19,600	19,600	17,999		21,280		19,280	21,630
Deputy/Operations Director (Janzen)	28,840	28,840	29,994		31,220		32,129	32,145
Program Manager (Dugan)	5,712	5,712	11,881		12,138		12,726	12,500
Total Fringe Benefits	77,362	77,362	84,012	35,806	89,118	57,118	89,991	91,360
c. Travel and Per Diem								
Program Staff Travel	30,000	23,700	30,659	30,659	20,000	20,000	40,000	30,000
Total Travel and Per Diem	30,000	23,700	30,659	30,659	20,000	20,000	40,000	30,000
d. Equipment/software >\$5000								
Equipment	0	0			0	0	425,405	0
Total Equipment>5000	0	0	0	0	0	0	425,405	0
e. Supplies/commodities/equipment<5000								
Program Supplies	2,000	2,000	4,100	16,100	1,000	1,000	2,189	1,000
Computers, software & Supplies/web services (google, adobe)	5,000	5,000	5,150	5,150	6,500	6,500	5,464	8,000
Meeting Food & Supplies/catering	8,131	8,131	3,090	3,090	3,328	3,328	3,278	3,500
Office Supplies	2,000	2,000	2,060	2,060	1,000	1,000	2,185	1,000
Total Supplies/commodities< 5000	17,131	17,131	14,400	26,400	11,828	11,828	13,116	13,500
f. Contracts/Services:								
Services								
Fiscal Sponsor Fee	112,540	112,540	121,916	121,916	124,000	124,000	188,095	130,398
Audits: A-133, Financial Statements	18,000	18,000	17,000	17,000	17,500	17,500	18,000	18,000
Graphic design/Website redesign	8,000	8,000	7,180	7,180	6,000	6,000	6,556	8,000
IT Support - Earth Web		5,000			0	0		0
Venue rental	920	920			0	0		0
Maintenance of Cook Inlet and Norton Sound buoys	15,000	1,500	15,000	15,000	10,000	10,000	15,000	10,000
Deployment of new wave buoys		0			0	0	20,000	0
Install/maint. water level sensors		0			0	0	100,000	
Legal Contracts/Services		10,000			0	0		0
Axiom Consulting and Design: AOS Data Services	540,000	540,000	540,000	540,000	540,000	540,000	600,000	540,000
IOOS Federal Advisory Committee Meeting Support					4,000	4,000		0
Total Services	694,460	695,960	701,096	701,096	701,500	701,500	947,651	706,398
Sub-Award								
UAF/IARC sea ice atlas (Walsh/Trainor)	6,000	6,000	6,000	6,000	6,000	6,000	49,630	6,000
UAF/OARC OA Monitoring (Cross & others)	95,000	95,000	58,000	58,000	29,000	29,000	95,000	29,000
UAF/SFOS Seward Line (Hopcroft)	100,000	100,000	100,000	100,000	105,000	105,000	100,000	105,000
UAF HFRs (Danielson)	156,000	156,000	156,000	156,000	156,000	156,000	306,000	156,000
UAF/SFOS ecosystem mooring (Danielson)	100,000	100,000	100,000	100,000	100,000	100,000	150,000	100,000
Alutiiq Pride OA Monitoring (Hetrick)			37,000	37,000	37,000	37,000		37,000
PWSSC OTN & snotels (Pegau)	75,000	75,000	75,000	75,000	75,000	75,000	94,904	75,000
MXAK WX/AIS (Page)	64,980	90,062	65,000	64,938	90,000	140,000	97,900	90,000
ADNR DGGGS water levels (Overbeck)	25,000	25,000	50,000	50,000	50,000	50,000	49,114	50,000
WHOI glider survey (Baumgartner)	99,969	99,969	99,900	99,900	100,000	100,000	99,507	100,000
UAF Kasper		7,000						
Axiom special projects (Bochenek)	409,538	409,538	482,000	482,000	620,000	620,000	95,000	
Environmental Sensor map								
ERDDAP server								
National MBON Data Portal								
Regional MBON Data Portal								
ATN DAC								
USGS OBIS Portal								
HFR Range Series File								
COASTT Seabird Data OTT Biology					15,000	15,000		
Ferry Installation (Tula-Hakai)		14,600	12,000	12,000				
UW/JISAO OA Ferry	14,600	6,824			10,950	10,950		
OA Equipment/Hakai					0	22,000		
UAF Winsor Freeze-up Buoy			20,000	20,000		0		0
Alaska Geospatial Coordinator			25,000	10,000	20,000	20,000		
OCM Funding			10,000	25,000	75,000	75,000		
Hakai OA OTT (Evans)			30,000	30,000				
UAF/ CBO Ice (Mahoney)		21,999			22,000	22,000	99,854	
SSSC SE Sentinel (Bell)	0				0	0	50,000	
ACCAP/SNAP Climatologies (Walsh)	0				0	0	29,028	
TBD State of AK Coasts Report	0				0	0	150,000	
TBD Sentinel Observing Sites	0				0	0	40,000	
TBD Marine Debris	0				0	0	20,000	
ATN regional workshop	25,000	25,000			0	0	0	
TBD modeling test bed & tools or RSS ROMS (Chao)	50,000	50,000			0	0	350,000	
Water level observations (NWS)	250,000				0	0		
ASTRA-FY17 agreement		154,893			0	0		
UNAVCO-FY17 agreement		100,547			0	0		
Alaska Sea Grant Bering Strait HABS					8,850	9,844		
UAF Danielson Fill the Gaps in Bering Strait HFR					900,000	900,000		
TBD Fill the Gaps - General					75,000	0		
OAP Burkolater Support								
Alutiiq Pride (Ramsey)					15,000	15,000		
Sitka Tribe (Kennedy)					15,000	15,000		
OAP ACAN					20,000	0		
UAF ACCAP Distance Learning (Kettle) NWS Funds					50,000	50,000		

H2400 FY2016-2020

	FY2016	FY2016	FY2017	FY2017	FY2018	FY2018	FY2019	FY2019
	Year 1 Descope	Year 1 revised 2018	Year 2 Descope	Year 2 Descope revised 2018	Year 3 Descope	Year 3 Descope revised 2019	Year 4 Original	Year 4 Proposed Descope
a. Personnel								
TBD UAF Seismic Tsunami Support (West) OAR/NWS Funds					276,668	276,668		
UAF/CFOS OA DBO (Konar)					89,103	89,103		
UAF/CFOS Autonomous Obs (Konar)					161,488	161,488		
Alaska Sea Grant Fellow				36,268				
Axiom Water Level Watch Data Portal						25,000		
Native Village of Kotzebue						10,000		
Total Sub-Awards	1,471,087	1,537,432	1,325,900	1,362,106	3,122,059	3,135,053	1,875,937	748,000
h. Other								
Symposium & Conferences	30,000	15,800	20,000	20,000	10,000	10,000	20,000	10,000
Non-staff Travel								
<i>Board & committee travel</i>	5,000	5,000	5,000	5,000	6,000	6,000	5,000	10,000
<i>Stakeholder & user group travel</i>	13,980	13,980	15,000	15,000	9,050	9,050	5,000	10,000
Rent/parking	60,000	60,000	56,260	56,260	38,400	38,400	65,564	42,000
Insurance	3,000	3,000	3,090	3,090	3,000	3,000	3,278	3,000
Telephone/Internet/refuse/IT support	6,000	6,000	5,820	5,820	12,440	12,440	6,556	8,000
Postage/Publications/printing	10,000	10,000	14,000	14,000	3,000	3,000	10,000	3,000
Memberships/dues/registrations	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
OA Travel/Supplies/Printing						20,000		
Total Other	142,980	128,780	134,170	134,170	96,890	116,890	130,398	101,000
TOTAL GRANT REQUEST	2,771,480	2,783,825	2,659,861	2,659,861	4,425,245	4,425,245	3,905,681	2,083,728
NOAA holdback: Cook Inlet obs (Holderied)	25,000	25,000	25,000	25,000	25,000	25,000	50,000	25,000
TOTAL FUNDING REQUEST	2,796,480	2,808,825	2,684,861	2,684,861	4,450,245	4,450,245	3,955,681	2,108,728

8) PROPOSED BUDGET ADDITIONS

A. Additional New Funds AOOS will receive this year (confirmed)

HF Radar O&M or procurement for Bering Strait radars	\$120,000
<i>Will be used to develop lighter remote power module, combined with existing on-shelf radar for a third station in Bering Strait, providing nearly complete coverage of strait.) Assuming level IOOS funding in future, AOOS will receive \$120K per year for O&M for Bering Strait radars going forward.</i>	
Gliders to support fisheries/ecosystem studies	
O&M to support existing glider fleet	\$195,000
Procurement for batteries/sensors	\$100,000
<i>We are working with UAF and NOAA to determine best location to establish new glider transects to support fisheries. discussion ongoing.) Assuming level IOOS funding in future, AOOS will receive \$295K per year for ecosystem glider operations.</i>	
Streamline access to observations	\$80,000
<i>To be used for highly visible observation or data projects that fill an important gap. Last year similar funds were used kick-start Water Level Watch data portal development, and to support installation of new AIS/weather station on St. Lawrence Island. Assuming level IOOS funding in future, AOOS will receive \$75-80K Per year for this. Projects could come from mini-proposals (see next item on agenda, or others.</i>	
Water Level Watch data portal development Phase II	\$25,000
<i>One-year support from IOOS in 2019.</i>	

B. Additional New Funds AOOS will receive this year (expected)

Increase access to biological data	\$15,000
<i>Similar to last year, which is being used to access COASTT seabird die-off data. Open to how we use it. Project must meet DARWIN CORE Standards (https://dwc.tdwg.org/terms/)</i>	

IOOS/Regional Collaboration projects \$50,000

Proposal addresses the need to connect observation data to ecosystem indicators information that feeds fishery management and status report products. This project proposes to link Alaska Fisheries Science Center with the Alaska Ocean Observing System to make Ecosystem Status reports visual and available electronically via the AOOS data management system. This is nationally relevant work that could be expanded to include NOAA West (CeNCOOS/Southwest Fisheries Science Center) interest in ecosystem indicator work requested for NOAA West FY 20 team budget. Southwest Florida Fisheries Centers already doing something similar.

Water Level Watch Data Portal Development Phase II \$25,000
Contribution from NOAA CO-OPS

Ocean Data Sharing \$xxx,000
Discussion in morning brief from Carl Gouldman.

C. Reallocation of existing funds

- About \$200K in personnel/fringe but 2 months still pending and need to keep available 4 months as contingency if grant is not received in timely fashion (June - September).
- About \$50K in Other, largely due to over-budgeting for rent/parking and postage/printing.

Staff Recommendations

Use some combination of the above \$50K and the \$80K in Streamline Access to Obs for the following:

1. Workshops/stakeholder engagement preparing for FY21-25 proposal \$20,000
 - a. Including possible marine debris and PWS workshops
2. Replace equipment on existing AOOS projects (from mini-proposals)
 - a. Russ Hopcroft sensor on Seward Line ship \$5,693
 - b. Kate Stafford replace borrowed hydrophones on CEO \$11,905
3. Thompson: Convert UNAVCO GNSS Observations into Water Level data & operationalize methodology (mini-proposal) \$27,258
4. Janzen: AOOS_ASTRAL remote install (mini-proposal) \$30,000
5. Buessler: Hydroball river bathy surveys (mini-proposal) est. \$50,000 total, but likely AOOS contribution @\$20K
6. Long: Kodiak Burkolator for village OA sampling \$48,230
7. Maintain NREL CDIP Buoy near Kodiak using existing AOOS funds. \$20,000