IOOS
Integrated Ocean Observing System

Our Eyes on the Ocean, Coasts, and Great Lakes

August 4, 2022

FY 2022 Alaska Ocean Observing System Award Information

Dear Ms. Wisdom,

The U.S. Integrated Ocean Observing System (IOOS) Office has recommended funding in the amount of $4,056,193 in Fiscal Year 2022 (FY22) for your NOAA award #NA21NOS0120094, entitled, *"Implementation & Development of Alaska Regional Coastal Ocean Observing System (AOOS) FY 2021-2025."*

At your request, we have held back $25,000 for transfer to Kris Holderied at the National Ocean Services (NOS) National Centers for Coastal Ocean Sciences (NCCOS) Kasitsna Bay Lab, $10,000 for transfer to Phyllis Stabeno at the Pacific Marine Environmental Laboratory (PMEL), $15,000 for transfer to Catherine Berchok and $25,000 to Chris Long at the National Marine Fisheries Service, Alaska Fisheries Science Center. These funds are not included in the recommended funding level mentioned above.

The Consolidated Appropriations Act, 2022 provided $41M in funding for IOOS Regional Observations with associated guidance stating that "NOS is encouraged to: (1) work to complete and operate the National High Frequency Radar System to close key gaps in the U.S. surface current mapping system; (2) expand the regional underwater profiling gliders program; (3) increase support to maintain the buoy systems supported by IOOS and to continue to add buoys in regional priority areas." In addition, the Act includes "no less than $2,500,000 to continue the five IOOS Harmful Algal Bloom (HAB) pilot programs initiated in fiscal year 2020 and to continue to support the HAB monitoring and detection test bed in the Gulf of Mexico initiated in fiscal year 2021." (Refer to Table 1 and 2 for reference)

The Act also provides $2,500,000 "for the regional ocean partnerships (ROPs), or their equivalent, to enhance their capacity for sharing and integration of Federal and non-Federal data to support regional coastal, ocean, and Great Lakes management priorities." These funds are distributed to the IOOS Office through NOAA's Office of Coastal Management. (Refer to Table 2 for reference)

The NOAA Ocean Acidification Program (OAP) has provided $212,590 in FY22 resources in support of projects carried out by AOOS partners in support of NOAA's mission requirements under the Federal Ocean Acidification Research and Monitoring Act (FOARAM Act). These projects include the continuation of two NOAA Ocean Acidification Observing Network long-

term time-series stations (NOA-ON, $170,000), and continued support of the Alaska Ocean Acidification Network (AOAN, $42,590). The OAP provides support specific to the servicing and maintenance of the GAKOA and M2 OA time-series. Each of these stations contributes to the nation-wide NOA-ON and serve as important nodes within the broader network of sustained OA observing assets supported by the NOAA Ocean Acidification Program and implemented by the NOAA Pacific Marine Environmental Laboratory's Carbon Group in partnership with extramural collaborators and IOOS. This extensive network allows for comparisons of the dynamic range and controlling factors of acidification across diverse ocean regions. The OAP continues to invest in regional OA capacity building and stakeholder engagement activities advanced by the regional OAP sponsored Coastal Acidification Networks (CAN). These CANs provide for fostering national, regional, state, and local engagement on ocean acidification. In FY22 the OAP will be providing $25,000 towards the project entitled "Maintaining and expanding the Alaska Ocean Acidification Network: engaging Alaskans to advance ocean acidification science, public understanding and response" (PI Dugan, AOOS). These resources contribute partial salary support for the AOOS program manager (Darcy Dugan) to facilitate AOAN activities including coordinating with the Interagency Working Group of Ocean Acidification (IWG-OA), other national CANs, and the NOAA OAP. The funds will also provide for the meeting cost of an Alaska State of the Science workshop. An additional $17,590 will be provided to PI Dugan (AOOS) for "Strengthening community sampling across Alaska through an in-person workshop", in response to the monitoring needs identified in the IWG-OA monitoring prioritization plan. (Refer to Table 2 - Ocean Acidification)

Table 1, below, reflects the total core funding amount for FY22 (this is the amount after the holdbacks you requested). The intent is that this core amount be considered the sustained amount of funding for a regional observing system, if appropriations remain level. RAs can use this amount to plan from one year to another.

The United States Government, through the Consolidated Appropriations Act, directs the IOOS Office to support a number of thematic priorities as noted above. One of these priorities is the existing High-Frequency Radar (HFR) stations. The Integrated Coastal and Ocean Observation System Act of 2009 was reauthorized in 2020 and amended to direct the IOOS Office to support, "a deployment plan that prioritizes closing gaps in high frequency radar infrastructure in the United States." Accordingly, while you may allocate funds to support any priorities within the region, the allocation should not be one that negatively affects the performance of HFRs or reduces the area of HFR measurement coverage. HFR coverage area and performance is measured by a metric approved by the IOOS Office Surface Currents Program Manager that was developed with input from an IOOS National HFR Technical Steering Team and the IOOS HFR community. Providing you with the flexibility to determine how to operate and maintain these stations will still require AOOS to report to the IOOS Office Surface Currents Program Manager on activities specific to its HFR stations through the cooperative agreement reporting requirements.

As with HF Radars, we understand the need to continue to build and expand the underwater glider network. This is another thematic area which is a priority to IOOS and where appropriated funds must be directed towards. Our goal is to allow you the flexibility to determine regional needs for glider operations and how much funding will be directed to meet

those needs. We expect each RA to coordinate with the IOOS Office and report on AOOS actions through the cooperative agreement reporting cycle.

As noted in our letter dated April 26, 2021, the IOOS Office is committed to make the work of environmental justice, equity, diversity, and inclusion core to what we do and how we operate. In Fiscal Year 2021, the IOOS Office set aside funding-to match funding from the regions to build an approach for tackling this issue and promoting diversity, equity, inclusion, and accessibility. In Fiscal Year 2022 we intend to also allocate funding towards this effort. We continue to believe that together, we can deliver IOOS information to enrich lives and livelihoods while also making inclusion, racial equity, and support for underserved communities a central part of our work. The IOOS Association, directly working with the RAs and the IOOS Office, will continue to coordinate the work to be done with these funds.

The Integrated Coastal and Ocean Observation System (ICOOS) Act of 2009 (Pub. L. 111-11, codified at 33 U.S.C. 3601-3610) and the Coordinated Ocean Observation and Research Act of 2020 (Public Law 116-271, Title I) directs the U.S. IOOS Office to develop national system capacity; please make the following allotments with FY 2022 funding.

Feel free to contact me regarding your FY22 funding at Dave.Easter@noaa.gov. If you have technical questions about how to initiate an award action request in Grants Online, contact the Grants Online Help Desk at 1-877-662-2478.

Regards,

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Dave Easter
U.S. Integrated Ocean Observing System

Table 1. CORE Regional IOOS funding

Core IOOS Funding			
Amount	**Funding Area**	**Task**	**ASAP TAS BETC Codes**
$2,649,136*	Core	Sustained operational funding and service delivery.	FY22REG022-T-002- 001

*The amount included, $2,649,136, is the total core funding minus the holdback, which total $75,000, as described above.

Table 2. Non CORE funding

IOOS, NOAA, and Other Agency Funding			
Amount	**Funding Area /Recipient**	**Task**	**ASAP TAS BETC Codes**
$15,000	Axiom	HFR - Products & Data Management - support to finalize HFR Range Series file archiving through Research Workspace	FY22REG022-T-003-002
$300,000	Harmful Algal Blooms (HABs)	To further HABS understanding and prediction via a pilot project to "Continue the support of a full-time AHAB coordinator, and increase sampling."	
$20,128	One Time System Add Ons	HFR system wide support - support for retuning/testing/additional work by AOOS's HFR Operators to Comply with FCC Regulations.	
$35,000	AOOS	FY22 one time. These funds will be used to assist with core needs of the Regional Association.	
$80,000	Axiom	Maintain and enhance Data Access Service Software - ERDDAP	FY22NATDMAC022-T-003-003
$50,000	Axiom	Environmental Sensor Map and Global Data Integration	
$3,000	Axiom	Trello Subscription	
$10,000	Axiom	NOAA Alaska Regional Collaboration Team to support the Cook Inlet Operational Forecast System model validation and application development	FY22 CIOFS022-T-003-004
$74,348	AOOS/University of Alaska Fairbanks	The funds will support a University of Alaska Fairbanks Masters student working on our Alaska ECOHAB project (PIs: Kathi Lefebvre & Don Anderson)	FY22 NCCOS 022-T002-002
$187,691	AOOS	Office of Marine and Aviation Operations (OMAO) support for glider operations/UxS Project: Year 3 of the International Year of the salmon glider project - Demonstrating operational readiness	FY22 OMAO022-T-003-005

		of AUV-based ecosystem monitoring through a field program supporting the International Year of the Salmon.	
$244,400	Regional Ocean Partnership	Regional Ocean Data Sharing Initiative	FY22 OCMROP022-T-003-006
$19,975	AOOS	Skipper Science Project. Developing Long-Term Pathways to Incorporate Stakeholder Local Ecological Knowledge into the Gulf of Alaska Science Advisory Process	FY22 NMFS022-T-003- 007
$75,000	AOOS/University of Notre Dame	Operational Coupling of NWM with ADCIRC in Global ESTOFS (PI Johannes Westerlink, University of Notre Dame)	FY22 OCM WATER 022-T-003-008
$50,000	AOOS	Funds to support Cook Inlet model hindcast and information product efforts	FY22NCCOS COOK INLET-T-003-009
$85,000	Ocean Acidification	OAP allotment of FY22 project resources in support of the NOAA Ocean Acidification Observing Network (NOA-ON) GAKAO (PI Monacci, University of Alaska at Fairbanks)	FY22 OAP 022-T-003-001
$85,000	Ocean Acidification	OAP allotment of FY22 project resources in support of the NOAA Ocean Acidification Observing Network (NOA-ON) M2 (PI Monacci, University of Alaska at Fairbanks)	
$42,590	Ocean Acidification	OAP allotment of FY22 project resources in support of the Alaska Ocean Acidification Network (PI Dugan, AOOS)	
$29,925	AOOS	Funds to support coordinating and administration support by the Alaska Conservation Foundation for fishermen and community members contributing to climate and Ocean Acidification work/workshops.	