



Our Eyes on the Ocean, Coasts, and Great Lakes

FY 2021 Gulf of Mexico Coastal Ocean Observing System Award Information

May 11, 2021

Dear Dr. Kirkpatrick,

The U.S. Integrated Ocean Observing System (IOOS) Office has recommended funding in the amount of \$4,294,944 in Fiscal Year 2021 (FY21) for your NOAA award #NA21NOS0120092, entitled, *“Continuing the Development of the Gulf of Mexico Coastal Ocean Observing System.”* NOAA’s Grants Management Division will notify you of the availability of these funds.

The Consolidated Appropriations Act, 2021 provided \$40.5M in funding for IOOS Regional Observations with associated guidance in the Omnibus Report directing “NOS to expand the regional underwater profiling gliders program consistent with House direction as well as for disaster response and the forecasting of freshwater and marine water quality.” The House direction “supports IOOS’ efforts to expand its use of underwater gliders.” In addition, the Omnibus Report states, “The agreement also adopts House direction and provides \$2,500,000 to continue and expand the IOOS-sponsored pilot programs launched in fiscal year 2020 to enhance the monitoring and detection of HABs. In addition, the agreement provides up to \$1,000,000, from within funds allocated to the IOOS-sponsored pilot programs, for IOOS to establish an initial HABs monitoring and detection test bed in the Gulf of Mexico. The agreement expects that the test bed will deploy, operate, and test a range of technologies and also determine the data management and dissemination needs for operating and maintaining a complete end-to-end HABs detection and monitoring system. The agreement encourages the testbed to be established in an area that has experienced HABs in recent years and which has existing expertise, infrastructure, and collaboration between IOOS, an IOOS regional association, and academic and State partners that can be readily leveraged.”

NOAA’s Ocean Acidification Program (OAP) is providing \$122,592 in FY21 towards OAP sponsored projects carried out by GCOOS partners in support of NOAA’s mission requirements under the Federal Ocean Acidification Research and Monitoring Act (FOARAM Act) including maintaining the Gulf of Mexico NOAA Ocean Acidification Observing Network (NOA-ON) station (\$92,592, PI Howden, USM) and the Gulf Coast Acidification Network (\$30,000, PI Kirkpatrick, GCOOS). 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 FY21 the OAP will be providing \$30,000 towards the project entitled “GCAN coordination with OAP and National CAN Team: Response to the Coordinated Ocean Observations and Research Act (COORA) of 2020” (PI Kirkpatrick, GCOOS). These resources contribute partial salary support for the GCAN Coordinator, website update and maintenance, and publication cost. During the 2021 to 2022 funding period, GCAN will work to synthesize and report information of socioeconomic risks and vulnerabilities; impacts to habitats, coastal and marine resources, and research and monitoring gaps and priorities in response to the Interagency Working Group-OA congressional reporting requirements. The NOAA Ocean Acidification Observing Network long-term time-series station (NOA-ON) in the northern Gulf of Mexico (PI Howden, USM) represents an important node in the NOA-ON and the resources provided here represent the first installment of a three year approved project to sustain this station. USM will conduct servicing and maintenance of the time-series station in partnership with the NOAA Pacific Marine Environmental Laboratory’s Carbon Group.

\$100,000 is included in this GCOOS award for the implementation of project activities associated with the NOAA Deepwater Horizon CETACEAN project - convening data providers and stakeholders, linking back to technical database development and other project elements.

\$300,000 is included in this GCOOS award for the deployment of lower cost continuous nutrient sensors to better understand and evaluate nitrogen and phosphorous levels and impacts at selected locations in the Gulf of Mexico. The Gulf of Mexico Division of the Environmental Protection Agency (EPA) works with partner agencies and states to continue to maximize the efficiency and utility of water quality monitoring efforts for local managers by coordinating and standardizing state and federal water quality data collection activities in the Gulf region. Enhanced monitoring, research, and field testing of recently developed continuous, deployable nutrient sensors is needed in the Gulf Coast region to help make sensors and collecting nutrient monitoring data more cost effective, accessible, and readily available. This project will deploy nutrient sensors at multiple sites that include at a minimum Florida panhandle (especially green water); Mobile Bay; Mississippi Sound; Louisiana Hypoxic Zone; Lake Pontchartrain and Coastal TX. Specific locations within these areas and specific nutrient related issues and questions will be determined by the collaborative partners. Additionally, one additional sensor will be deployed to address the opportunity for better linkages between atmospheric deposition and nutrient loading in water. Tampa Bay is a candidate for atmospheric deposition although final site selection is yet to be determined.

I want to highlight table 1 below and provide an explanation as to why it is different compared to previous years. In the past, table 1 provided a break out of core funding. Core funding was defined as the total of Regional Coastal Ocean Observing System (RCOOS)¹, High Frequency Radar Operations and Management (HRF O&M)², and Fill the Gaps – Adjustment to Base (FTG-

¹ Regional Coastal Ocean Observing System (RCOOS) funding is the amount that has been referred to as RCOOS Base in past years. Identifying this amount allows the IOOS Office to track baseline funding levels to previous years.

² HF Radar – Operations and Management is the HFR O&M funding level from past years and does not include O&M for radars added with “Fill the Gaps” funds.

ATB)³ funds and the starting point for determining next year's funding for the RA, if appropriations were level. The table was broken out into these three sectors to allow the Office to better coordinate with the Regional Association (RA) on prioritization and funding for a sustained system, and track Fill the Gaps investments. In an effort to continue meeting Congressional directives, yet providing for more flexibility on how funds are distributed, the IOOS Office has determined that beginning in FY21 GCOOS will receive a single core funding amount, which is the sum of past year's RCOOS, HF Radar Operations O&M, and Fill the Gaps-Adjustment to Base. For FY21 this amount is \$2,449,000. Moving forward the Office will identify only one amount as the core amount. You will no longer be receiving funds broken down by RCOOS, HF Radar Operations O&M, and FTG-ATB. It is up to the discretion of the RA to determine amounts and prioritize these amounts. 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 stations. While you may allocate funds to support any priorities within the region, the allocation should not be one that negatively affects the performance of HF radars. HF radar performance is measured by a metric approved by the IOOS Office Surface Currents Program Manager that was developed with input from a IOOS National HF Radar Technical Steering Team and the IOOS HF radar community. Providing you with the flexibility to determine how to operate and maintain these stations will still require GCOOS to report to the IOOS Office Surface Currents Program Manager on activities specific to its HF Radar 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 GCOOS' 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. As a first step, the IOOS Office has set aside Fiscal Year 2021 funding from our national line to match funding from the regions to build an approach for tackling this issue and promoting diversity, equity, and justice. 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 coordinate the work to be done with these funds.

³ Fill the Gaps - Adjustment to Base is funding that will be included in the RA's next year's Core funding level if appropriations are level. This does not include one-time procurements or add-ons.

The recommended funding amount for FY21 is different than requested in the proposal. A special award condition (SAC) is placed on your cooperative agreement requiring you submit a revised work plan for FY21 based on this new funding level. Please begin working with your constituents now. Refer to your official award documents, when you receive them later this year, for the due date applicable to this task. As you consider which products or services will be affected by the change in funding, please consult with the IOOS Office prior to removing any type of assets from deployment, including any proposed reduction in your Data Management and Cyberinfrastructure (DMAC) capabilities.

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 2021 funding:

Table 1. CORE Regional IOOS funding

Core IOOS Funding (\$2,449,000)			
Amount	Funding Area	Task	ASAP TAS BETC Codes
\$2,449,000	Core	Sustained operational funding and service delivery.	FY21REG021-T-000-005

- Core funding is based on RCOOS (\$1,609,433) + HF Radar - O&M (\$143,000) + FTG ATB (\$663,567) + FY 2021 increase (\$33,000).

Table 2. Non CORE funding.

IOOS, NOAA, Other Agency Funding			
Amount	Funding Area /Recipient	Task	ASAP TAS BETC
\$100,000	Fill the Gaps – One-time System Add-on	Glider one time -UG2 Coordinator, \$100,000	FY21REG021-T-000-005
\$51,000	Fill the Gaps – One-time System Add-on	High Frequency Radar - Fill The Gaps - Procurement	
\$1,097,000	Harmful Algal Blooms (HABs)	To further HABS understanding and prediction.	
\$ 32,851	Ocean Acidification	Ocean Acidification Program Observing System Simulation Experiments (OSSE) / Observing System Experiments (OSE).	
\$92,592	Ocean Acidification	OAP allotment of FY21 project resources in support of theNOAA Ocean Acidification Observing Network (NOA-ON) GCOOS Gulf of Mexico (PI Howden, University of Southern Mississippi)	FY21OAP021-T-000-004
\$30,000	Ocean Acidification	GCOOS Gulf Coast Acidification Network.	
\$10,000	HABs/National Centers for Coastal Ocean Sciences (NCCOS)	Support work on HABscope development as part of the NCCOS HAB Forecast HABscope Incentive Award.	FY21HABSCOPE021-T-000-002
\$32,501.00	Texas Agricultural & Mechanical University (TAMU)	Glider funding from the Office of Marine Aviation Operations to support for an additional 2021 Hurricane Glider Deployment.	FY21OMAO021-T-000-003
\$100,000	Restoration	NOAA Deepwater Horizon, National Marine Fisheries Service Restoration Office - CETACEAN Project	FY21CETACEAN1021-X-000-001
\$300,000	Interagency Agreement with Environmental Protection Agency	Next generation water nutrient sensor testing	FY21EPA21-R-000-006

Please note, with the exception of the Core funds, the above allotments may not be cut as part of your revised work plan.

Feel free to contact me regarding your FY21 funding at Oriana.Villar@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,

Oriana Villar
U.S. Integrated Ocean Observing System