

U.S. IOOS Office Updates

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Director, U.S. IOOS Office

May 11, 2023





NOAA FY22-26 **STRATEGIC GOALS**



**BUILD A CLIMATE
READY NATION**



**MAKE EQUITY CENTRAL
TO NOAA'S MISSION**



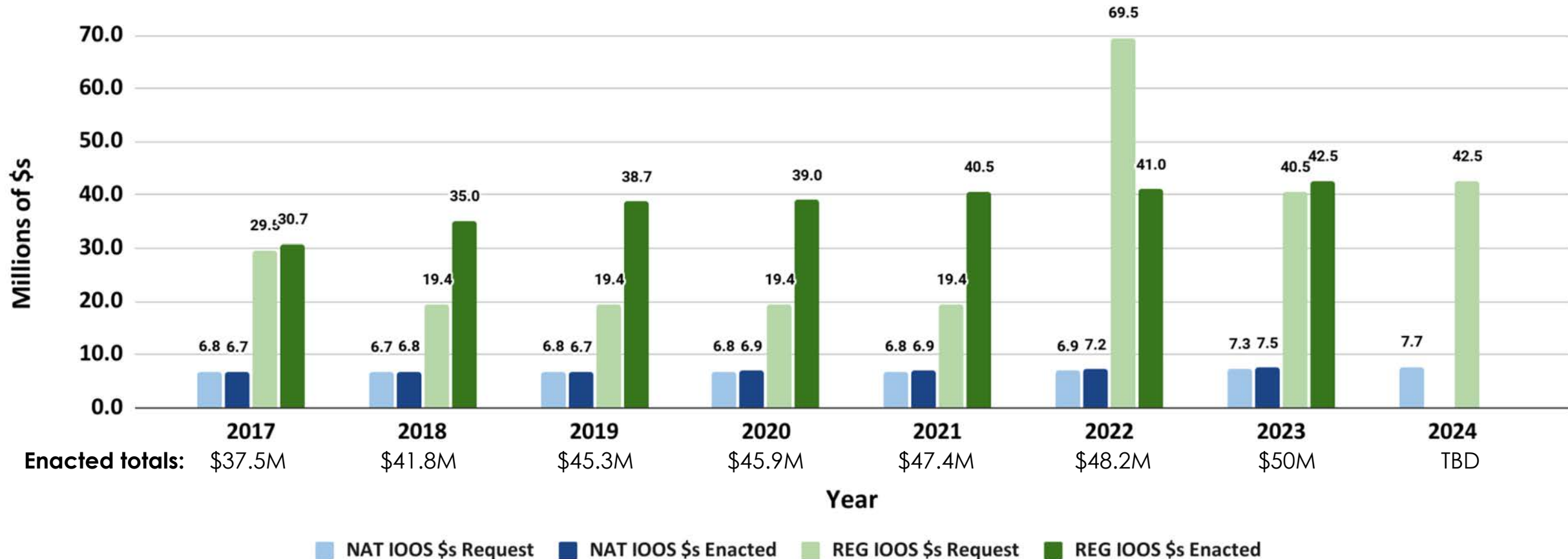
**ACCELERATE GROWTH IN
AN INFORMATION-BASED
BLUE ECONOMY**



U.S. IOOS Enacted and President's Budgets FY17–24

NOS IOOS Request & Appropriation History

Part of the Story - not including 'backbone and global'



NOAA National Ocean Service - Navigation, Observations, and Positioning:
 'National IOOS' & 'Regional IOOS Observations'

- Estimated Enacted levels are 'post rescission' totals for each year
- 'Request' = the President's Budget Request

Next Steps - Budget



FY23 Appropriations

- **Regional Observations** = \$42.5M
- **National IOOS** = \$7.5M



FY22 & FY23–26 Bipartisan Infrastructure Law (BIL; formerly IIJA)

- **Prov 3:** Flood Inundation Mapping = \$4.5M
- **Prov 11:** Coastal and Ocean Observations = \$7.3M
- **Prov 12:** Regional Ocean Partnerships = \$1.8M



FY23 Community Special Project (congressionally directed)

- **Six total projects administered by IOOS**

FY23–26 Inflation Reduction Act



- **Coastal, Economic, and Climate Resilience** = \$3.3B for NOAA over 4 years
 - Coastal Communities & Climate Resilience = \$2.6B for NOAA



FY23–26 Inflation Reduction Act

- **Coastal, Economic, and Climate Resilience** = \$3.3B for NOAA over 4 years
 - Coastal Communities & Climate Resilience = \$2.6B
 - Enable coastal communities to prepare for extreme storms and other changing climate conditions
 - Support natural resources that sustain coastal and marine resource dependent communities
 - Support marine fishery and marine mammal stock assessments

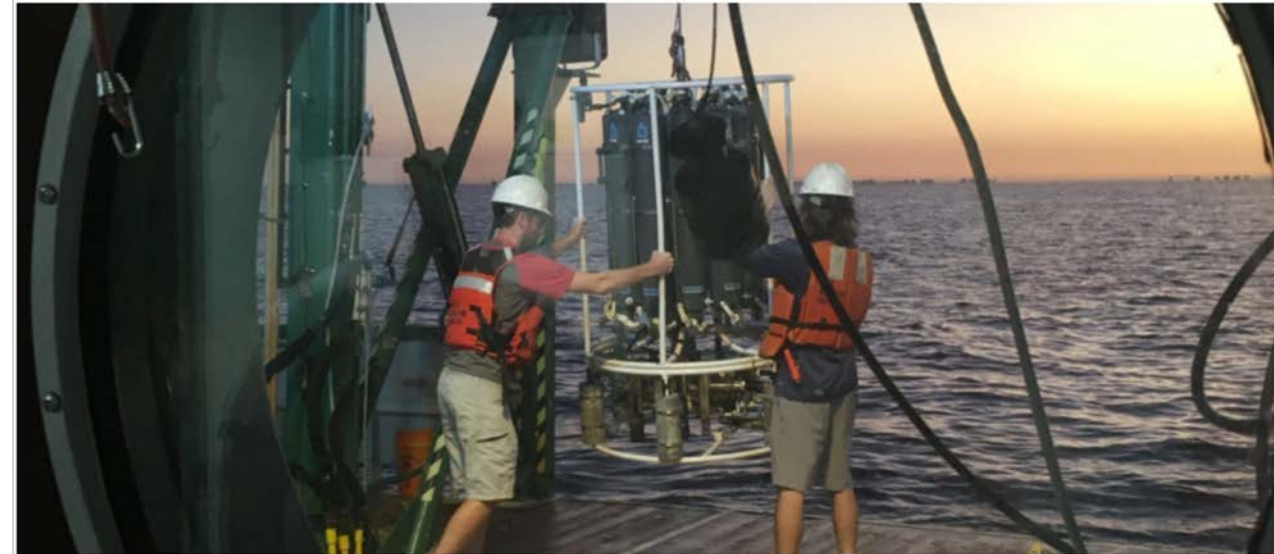
NOAA's New Blue Economy Vision

A sustainable and equitable ocean and coastal economy that optimizes advances in science and technology to create value-added, data-driven economic opportunities and solutions to pressing societal needs.



National Harmful Algal Bloom Observing Network (NHABON)

Year	Award	# Pilot Projects	# RAs Involved
FY20	\$1M	5	6
FY21	\$1.5M	7	8
FY22	\$2.5M	10	11
FY23	\$3M	TBD	TBD



NHABON Implementation Plan in review and headed to Congress

Goal: *Integrate existing assets and research efforts across NOAA into a more formal national observing network*



IOOS Glider Program

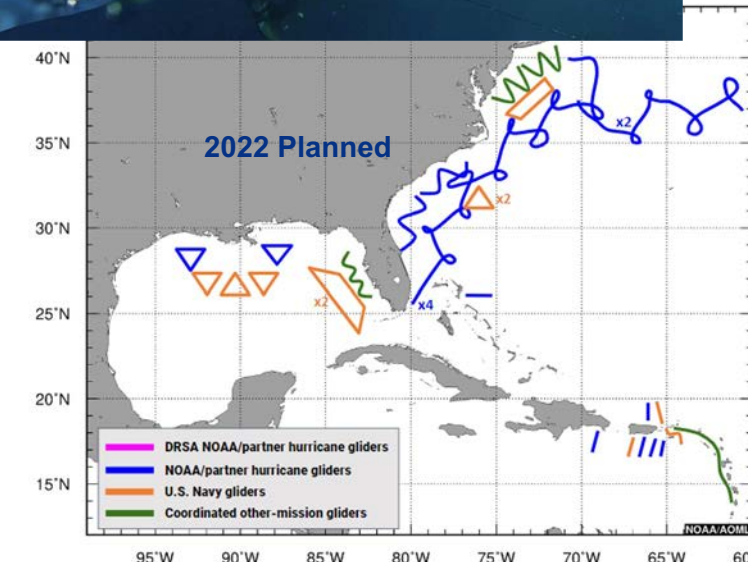
Successful Underwater Glider User Group (UG2) Workshop

(September 2022)

- 160 participants in plenary talks and breakout sessions
- UG2 Slack channel has been active (sign up via underwatergliders.org)

Hurricane Monitoring:

- 5th year of the NOAA-Navy collaboration.
 - 12 gliders contributed by the U.S. Navy
- **Gliders captured Hurricane Fiona** (AOML and CARICOOS)



Marine Biodiversity Observation Network (MBON)



National Oceanographic Partnership Program:



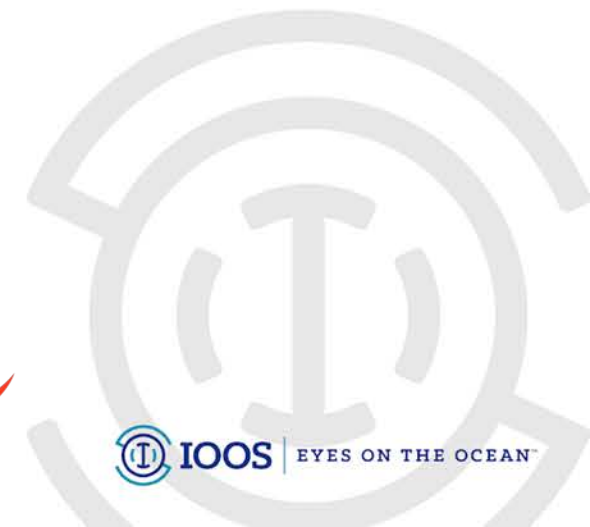
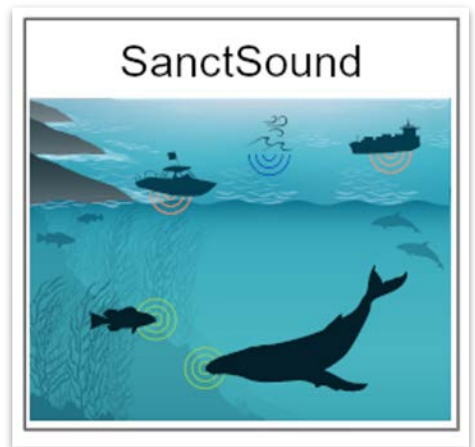
FY22 Marine Life solicitation
(NOAA, NASA, ONR)

5 new projects:
CeNCOOS, NERACOOS,
GCOOS, AOOOS, SECOORA

Global Efforts:



Products:



Surface Currents Program: HF-Radar Network

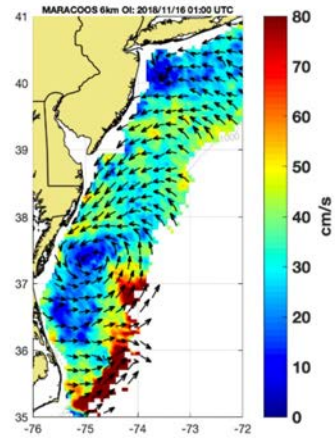


RATES: 5 High-res HFRs in Galveston Bay and Sabine Lake, TX

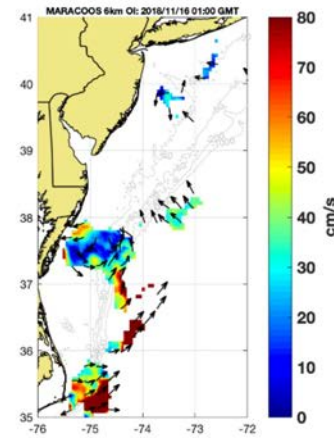


Retuning HFRs to FCC-approved radio broadcast frequencies

Total Map **With No Interference**



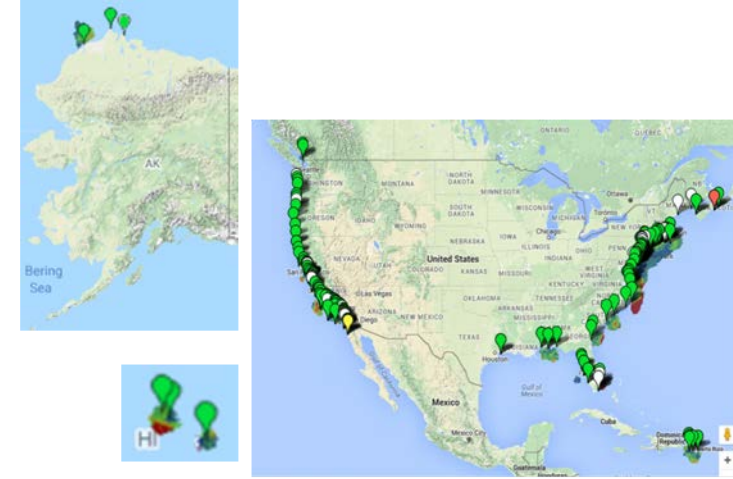
Total Map **With Interference**



Wind Turbine Interference mitigation software



Configuring HFRs to measure waves



Continued siting for new HFR installations



Expansion of HFR modeling for U.S. Coast Guard search and rescue

Ocean Technology Transition (OTT) Program

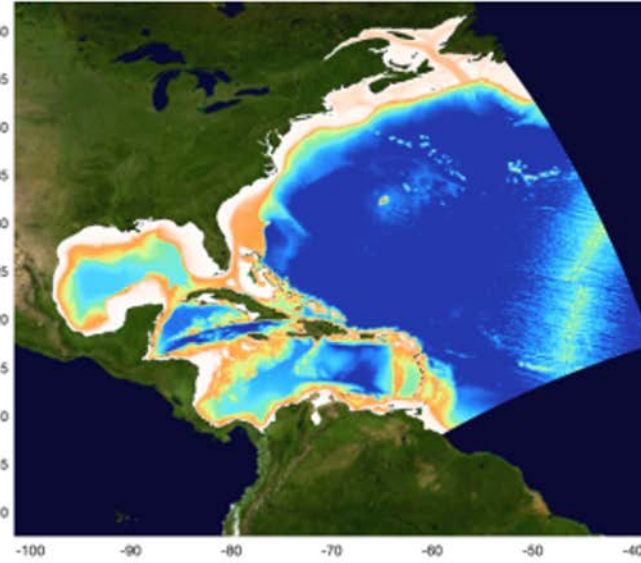
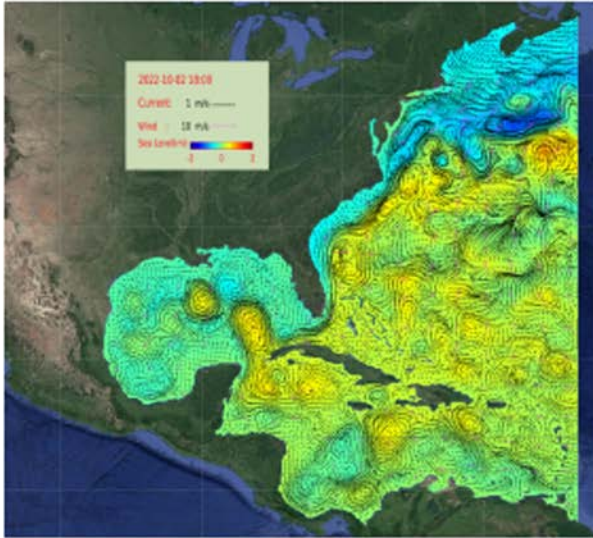


NOFO: <https://www.grants.gov/web/grants/view-opportunity.html?oppld=342720>

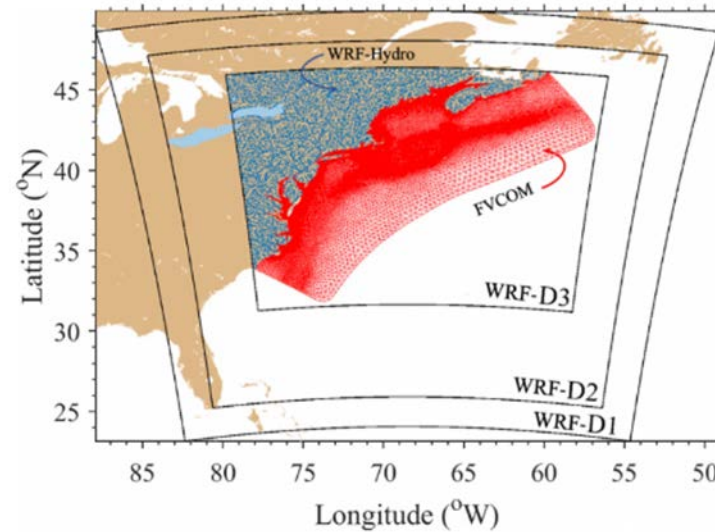
Review Panel	6–10 March 2023
Funding Decisions	April 2023



Coastal and Ocean Modeling



ECCOFS



SECOFS

NECOFS



Activities and Announcements



Last IOOS Fall Meeting -
Nov. '22 in Puerto Rico

Spring Meeting & Hill Visits

Mar. '22 in Washington, DC

Next IOOS Fall Meeting

- TBD, SCCOOS hosting
- Tentative 2025, AOOS



Recommendations to
NOAA and the IOOC

by the
U.S. Integrated Ocean
Observing System
Advisory Committee

Federal Advisory Committee to the National Oceanic and Atmospheric
Administration and the Interagency Ocean Observation Committee

June 2021

U.S. IOOS Advisory Committee

- New recommendations submitted to NOAA and IOOC on Climate Adaptation, DEIAJ+, and the New Blue Economy
- Next public meeting June 27–29, hosted by CeNCOOS (MBARI)

Thank You!!!

Congrats to SECOORA for:

- **Grants Management, Tracking, and Reporting**
- **Technology Integration**
- **FACT Network**
- **GCOOS-SECOORA-MBON Partnership for beyond Sanctuaries**



NOAA's Initiatives on Marine Carbon Removal

Brandon Barlow
Knauss Fellow, U.S. IOOS Office

May 11, 2023



Mission and Values

- **Science.** NOAA CDR research must be **transparent** and verifiable (e.g. what works and what doesn't).
- **Service.** NOAA CDR research should support evidence-based decisions with **actionable** knowledge, information, and tools.
- **Stewardship.** NOAA CDR research should support a broad constellation of **collaborative** efforts with targeted opportunities to advance effective (efficient and durable) and accountable (safe, sustainable, fair) CDR research.

Questions?

Coastal Resilience Role for IOOS?

“Coastal resilience is the ability of populations, ecosystems, and economies to **prepare for, absorb, respond to, recover from, and successfully adapt to** the impacts of natural and human-caused hazards, such as hurricanes and oil spills, and long-term environmental change, such as habitat loss and sea level rise.”

(National Ocean Service: draft definition March 2023)

Marine Carbon Dioxide Removal and Blue Carbon

What we will see in Observing, science, policy and markets?

Backup