

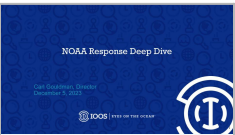

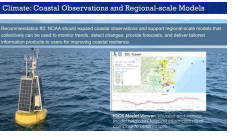
Fall 2023 IOOS Advisory Committee Meeting

NOAA Response Deep Dive Session

1. MATERIALS

- [Phase 1 Recommendations](#) (February 2023)
- [NOAA Response](#) (June 2023)
- [NOAA Response Deep Dive Slide Deck](#)

2. Carl's Slides and Talking Points

Slide	Talking Points
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2	 <p>FAC Recommendation Priority Areas</p> <ul style="list-style-type: none"> ● 3 priority areas from the AC recommendations submitted in February 2023 are: <ul style="list-style-type: none"> ○ Climate Impacts at the Oceans and Coast ○ Diversity, Equity, Inclusion, and Accessibility ○ Fostering Growth of the New Blue Economy
3	 <p>Climate: Coastal Observations and Regional-Scale Models</p> <ul style="list-style-type: none"> ● <u>Recommendation</u>: NOAA should expand coastal observations and support regional-scale models that collectively can be used to monitor trends, detect changes, provide forecasts, and deliver tailored information products to users for improving coastal resilience. ● <u>NOAA Response</u>- Part 1: <ul style="list-style-type: none"> ○ <u>From June</u>: NOAA continues to develop new and, where appropriate, upgrade existing Operational Forecast System models to include data assimilation of relevant IOOS core variables. Over a span of time (~5 years) to match BIL funding, NOAA will develop a prototype data assimilative regional model spanning the entire Eastern seaboard and Gulf of Mexico. ○ <u>Update</u>: In response to BIL, the IOOS Office awarded funds to develop three ocean and coastal models under Provision 3: Flood and Inundation Mapping and Forecasting, Water Modeling, and Precipitation Studies. These projects just began year 2 of 5. Two of these

projects (the Northeast Coastal Ocean Forecast System and the Southeast Coastal Forecast System) have a goal to develop and implement nearshore models that couple with the National Water Model, to predict coastal conditions and threats such as inundation. The third is a regional, data assimilative, East Coast Community Ocean Forecast System- a model that will provide boundary conditions for the aforementioned coastal models. Models may be tested and further developed in the NOAA Cloud Sandbox (NG4), to better prepare models for transition to operations in 2028.

- **NOAA Response - Part 2**
 - **From June:** NOAA is utilizing IRA funding to establish pan-regional and national data products and services to accelerate service delivery improvements across regions.
 - **Update:** The IRA Request for Applications has been announced, with applications due in March 2024. Topic 2 of this opportunity will address pan-regional needs.

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Climate: Regional Data Integration

- **Recommendation:** NOAA should expand regional data integration services to better integrate IOOS with other coastal and global climate programs and to better provide products and services for communities.
- **NOAA Response**
 - **From June:** The IOOS Office will implement this recommendation through its existing programs, in partnership with RAs and other NOAA offices (e.g., OAR). The timelines of those vary, with some already established on an annual cycle (e.g., OTT). The plans underway to grow the Ocean Enterprise and the Blue Economy will also be an opportunity to accelerate technology innovations and information services over the next five years.
 - **Update:** IOOS is addressing the recommendation in several ways. From FY2021 to FY2023, IOOS has funded the RPS Group and IOOS Association proposal 'Reaching for the Cloud' to explore ways to innovate the existing DMAC guidelines and approaches for delivering IOOS' observation and forecast data to end users. This work has led to discussion with the NOAA Open Data Dissemination (NODD) program with the goal of publishing virtual aggregations of existing NODD-hosted NOS Operational Forecast System model datasets, streamlining data delivery to these

NODD datasets for users, and potentially eliminating bottlenecks like THREDDS in many situations. In addition, IOOS is investigating options to expand and broaden this work through an upcoming RFA process, with the goal of enabling enhanced, cloud-based access to a broader range of IOOS' oceanographic datasets.

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New Blue Economy: Technology Advancement

- **Recommendation:** NOAA should invest in technology advancement by leveraging the IOOS network of government agencies, academia, and industry.
- **NOAA Response**
 - **From June:** IOOS Office will leverage new funds from BIL and IRA to accelerate new technological opportunities for the IOOS network of RAs as well as private sector entrepreneurs and small businesses. This will take at least five years to implement, as this is a new line of effort that will evolve and mature over time.
 - **Update:** As we heard about yesterday, the Accelerator program will support technology advancements. OCRA is a \$60M program that anticipates awarding \$3-5M in Phase 1, with 12-15 selections to be announced in Jan/Feb '24. Phase 2 will award \$55M to those select proposals by Dec '24. There is also \$40M for existing partnership programs. For example, \$8M is going to support 7 additional OTT projects not funded during the regular OTT process.

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New Blue Economy: STEM Education

- **Recommendation:** NOAA should promote IOOS to support STEM education in ocean sciences.
 - **NOAA Response:**
 - **From June:** The IOOS Office will continue to identify ways to increase students' exposure to careers in ocean data science and ocean observations, to increase and diversify the pipeline of ocean experts required to sustain ocean observing and service delivery in the future. These pipelines will take years to develop and mature and additional resources are needed to accelerate these efforts. The IOOS Office is also working with the NOAA Office of Education to coordinate with a cross NOAA team who is working with NSF to co-develop workshops and conferences to mutually support this arena over the next few years.
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- Update: Zack Baise is working with Louisa Koch and NSF. A NBE Workforce Needs survey was recently approved. NSF is looking into micro-credentialing program to say "here are trades we need in the industry and the types of skills needed". The survey will be sent to NBE enterprise sectors. Survey was circulated at MTS Oceans and it will be sent out in Ocean Enterprise study materials.

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Questions?

- We now have until 3:00 for questions and discussion.