### Work Plan Suggestions Next 3 Years

## Modeling

- Improve coordination between observational infrastructure and model forecast development needs
- Improving data collection for inundation studies and coordination with modeling/forecasting.

## R&D/New Technologies

- Consider opportunities to bolster early research and development (R2O levels 2-4) to accelerate transition process
- Data Development: Utilizing AI to assist in gap-filling where ocean observations are not currently realistic or affordable. Developing partnerships with private sector to meet this challenge.
- Technology review
- Products and Services: Entrepreneurship and Innovation and Ocean Obs
- Advocate for increased funding and access to initial capital for private sector companies through the SBIR/STTR programs and other similar initiatives that provide early stage funding to promising private sector innovations that are responsive to NOAA's, IOOS's, and society's needs.
- Monitoring, Reporting, and Verification (MRV) for ocean CO2 Removal (CDR), including existing and planned partnerships with industry and data products to inform policy and regulation.
- Data modernization and accessibility, including AI applications

## **IOOS Enterprise Collaboration**

- IOOC/Interagency collaboration
- Identify IOOC federal agency member ocean data priorities, and opportunities to leverage and complement by non-federal observing sectors
- Identify mechanisms to support shared use of ocean resources
- An examination of the pros/cons of diversifying core federal support to IOOS. Plus helping IOOS to articulate its value proposition to other IOOC agencies, to make the case for non-NOAA contributions to the sustained operations and maintenance of IOOS.
- Efforts to build out, support, and enhance public-private-government collaborations on coastal and ocean resilience, development of novel energy sources, and other adaptations to emerging ocean changes.
- Generate and articulate a policy that helps define an enterprise-wide approach to ocean observing, leveraging the strengths and avoiding the weaknesses of each of the contributing sectors, to include federal government, state and local governments, universities, private research organizations, NGOs, and private sector companies delivering relevant products and services.
- There are large-scale Ocean Weather patterns that transcend the footprint of the RAs. While IRA funding started PAN regional coordination, an effort should be made to identify PAN regional processes within IOOS.

- Revisit IOOS requirements gathering/setting.
- Streamlined federal and interagency coordination, and public-private partnerships

#### Continuation and expansion of ocean observations

- Adding a small amount of real-time moorings and mobile assets to cover geographic areas strongly affected by recent losses to the fishing industry
- How do existing assets including animal borne sensors further enable Dynamic Ocean Management? This is of particular importance to highly migratory species.
- Offshore wind energy development needs and opportunities for IOOS infrastructure
- NHABON
- What strategies are needed to cover gap once IRA projects are complete.
- Consider opportunities to expand public science ("citizen science") to fill observational gaps
- Better promote IOOS as an interagency tool for filling gaps in accessible ocean and coastal data, both through data collection and data integration from a variety of partners. IOOS is multi-mission supporting, but not utilized and leveraged to the extent it can be. This includes consideration of IOOS as a place for making commercially purchased data publicly accessible.

#### Data Sharing/Access

- Review and comment on/recommend additions to the ORAP Federal Ocean Data policy recommendation
- Data buys/acquisition strategy
- Explore how IOOS can currently fit into a NOAA plan for commercial data buys, as well as things IOOS can do to better position itself for a key role in the commercial data buy enterprise. This can cover IOOS's role as a data integrator and public access point to data, as well as looking at how IOOS's structure stacks up against commercial data buys, e.g., in cost efficiency.
- Generating and articulating a strategy to leverage and optimally incorporate the growing amount and quality of private sector ocean data, in a manner that brings value to the government (and therefore the citizenry) while preserving the private sector participants' ability to make a satisfactory return on investment for its owners and investors.
- Development of a national registry of "real-time marine ecological assessment tools" (i.e., models to predict whale migration patterns for a year based on the oceanographic characteristics of that year) and support for IOOS RAs to implement these tools.

#### IOOS Advisory Committee/NOAA- Internal

- Suggest continuing enterprise excellence committee, esp with scheduled program review, ICOOS reauthorization
- Mission of committee value proposition
- Discussion on new administration, NOAA leadership- most effective ways for IOOS to be effective in this new administration

# U.S. IOOS Advisory Committee

# Blue Economy

- Blue economy
- Expanding workforce development and economic opportunities (collab with MTS)