

**U.S. IOOS Advisory Committee
Virtual Public Meeting
Meeting Summary
November 29, 2021**

[Link to meeting webpage and presentations](#)

1. Summary of NOAA Leadership Briefing (Dr. Spinrad's remarks)

NOAA Leadership Priorities and Goals:

1. Ensuring NOAA is the authoritative source for climate products and services. In line with its responsibilities and capabilities, specifically in the climate change sphere, NOAA is generating requirements to build the system based on collaboration. The pieces of the system range from collecting data to building products and services to delivering those products and services to program evaluation. It is vital that we consider this work in a mission agnostic manner.
2. Building-up the private sector (New Blue Economy). Products and services are the major commodity of this economy and they come directly out of IOOS.
3. Building an equity lens in everything NOAA does. The most vulnerable communities' needs should be prioritized and they should be fully engaged in the work being completed.

NOAA's Future Opportunities:

It was noted that NOAA is ready for a system-wide reset. The five factors demanding this are outlined below:

1. Increase in and change in types of funding. Four streams of money will be coming into NOAA (Pres Budget, Infrastructure, Regional Ocean Partnerships/Hurricanes, and Build Back Better). This resource climate is new and NOAA needs to be prepared to keep up with the influx and scope long-term plans.
2. Focus on economic development. The IOOS Enterprise Study shows the growth in the industry and NOAA should be and is currently reaching out to different communities that are not normally connected to ocean observing but who will benefit from the services and products provided.
3. Need for coastal resilience and adaptation. NOAA and IOOS are in the best position to supply the needed data and information.
4. Need for Products and Services (mission agnostic).
5. Changes in operational concepts. Science, data collection, and modeling are being done differently and NOAA needs to keep up so that we can provide the best products and services.

Suggestions/Advice for Future Actions and Focus Areas:

1. IOOS provides the raw material needed for climate products and services. It needs to continue efforts such as the Coastal Climate Signal White Paper and learn from previous lessons.
2. IOOS and partners should focus on the larger impacts of better funding and infrastructure (lives impacted, commercial shipping, recreation) when communicating it's value rather than budget numbers and data loss.
3. Rather than trying to accomplish everything, focus on providing the best climate data and information which can be adapted for various applications for government and industry. Utilize criteria such as lives saved, cost savings, etc and ensure breadth of applicability and equity are factors.
4. In future work planning, focus on economic development, DEIA/increasing equity in the STEM workforce, and co-design with vulnerable, underserved communities.

2. Mark Osler's Summary Points

Coastal Resilience at NOS and NOAA:

1. Resilience is a condition which individuals or organizations work towards. It is an outcome achieved by others - not a product which can be created - and then delivered. Our charge is not to 'solve' these challenges on behalf of our communities, but rather for our civil society to bring its human, fiscal, legal, and policy resources to bear in a manner designed to lift up and support our State, Local, Tribal, and Territorial governments in understanding and engaging with the challenges on their own terms and with a deep respect for the right to self determination.
2. We are looking then to supercharge that elusive process whereby information and data - is transformed - into knowledge for a decision maker. No single program or agency has all of the relevant science - no agency has all of the relevant grant programs - no agency alone creates and supports networks and relationships with decision makers. Our challenge then is one of coordination and cooperation - it requires personal and organizational humility. As a community together - we have many colleagues - across and outside of the federal government - who have the requisite skills and wisdom, both in preparing science to make this translation, in the translation itself, and in building the communities outside of the federal government which are needed to sustain and enhance this virtual cycle.
3. There are lots of great work being done with respect to measuring and modeling climate change and its impacts - but NOAA is unique in that our mandate includes those components - and also carries the mission to issue forecasts and predictions - to actively manage our coasts and oceans, and the resources therein - and to build understanding and capacity within the public to do the same. I like to describe our coastal resilience work NOS in three streams that fit within the three broader NOAA mission areas:

- First, we provide the information through authoritative mapping, observations, and science;
 - Second, we have capacity-building and decision support services and;
 - Third, our programs implement many of NOAA's stewardship mandates in the coastal zone of coastal ecosystems.
4. Current activities within NOAA on this front include: NOS Coastal Resilience brain trust - biweekly meetings of subject matter experts, cross-NOAA effort on writing the Coastal Inundation at Climate Timescales Whitepaper, NOAA's Science Advisory Board focus on coastal resilience as a long-term priority, and NOAA's strategic plan.

Updates from the Interagency Space

1. Coastal Resilience is named as one of the 5 priorities within the White House National Climate Task Force, alongside Wildfires, Heat, Drought, and Flooding.
2. Coastal issues are also being prioritized within a number of the coordination bodies convened by the White House: SOST (Subcommittee on Ocean Science & Technology), USGCRP (US Global Change Research Program), and ICAMS (Interagency Council for Advancing Meteorological Services).

IOOS and Coastal Resilience

1. I see IOOS and the IOOS Regional Associations as a critical component of realizing the NOS vision for coastal resilience.
2. When I talk about the NOS foundational data, observations, and information, I am including the entire U.S. IOOS Enterprise.
3. And I am a firm believer in the power of partnerships to collectively address the issues we are facing and the IOOS framework is well suited to be in the co-development of solutions with end users and our extensive network of coastal practitioners.
4. Through both the IOOS program office and the IOOS regional association, this essential component will be key to reaching out to stakeholders and developing the resources and tailored information that will truly have an impact.

Ask/Thoughts to the IOOS Advisory Committee

1. We all generally understand that there is a value chain from observations, the technology which enables those obs, to research to modeling to tools and down into regional convening efforts, training, local capacity building and directly supporting local decision making. This entire value chain is needed to enable that magic moment where our data and information is transformed - into knowledge for someone else. And that this knowledge is used to help make a different decision that would have been made otherwise. The urgency to act and the impacts we are facing today lead to a perception that everyone in this value chain is choosing to or being asked to describe how their work impacts that very last piece. This dynamic is causing confusion about roles on the ground and it is

causing stress among the folks whose work isn't focused on that last piece. How do we support/urgency for relevance the observations and the data providers (not just the service providers)?

2. My question for the group is about how far down along the value chain do the RAs want to go? Certainly data and modeling along the coast - sometimes development of viewers and tools - often a key voice in regional discussions. Discussing these boundaries - where the handoffs to others occur would be helpful.

3. Suggested Areas for FAC involvement:

1. Economic Development (NOAA Leadership)
2. Climate Services and Products (NOAA Leadership)
3. DEIA/Equity in Workforce and Impacts (NOAA Leadership)
4. IOOS Office design an FY24 external review (IOOS Program Office)
5. National/Regional IOOS partnerships (IOOS Program Office)
 - i. Offer recommendations on
 1. The "sweet spot" for national oversight of the System by NOAA's IOOS Office
 2. The Regional Associations meeting national-level mission requirements of NOAA and other IOOC agencies.
6. Ocean Societal Indicators (IOOC)
7. Ocean-Climate Nexus (IOOC)
8. Environmental Justice (IOOC)
9. Modeling (IOOC)
10. Marine Life/Ecosystems (IOOC)
11. Opportunities to engage the broader ocean science community, in partnership with the IOOS Regional Associations, to expand and possibly augment the current IOOS observing system footprint. (COL)
12. Biological observing (COL)
13. Supporting industry based observing assets that would be used, likely via data buys, to complement the existing IOOS network in support of the Administrations 30 x 30, Seabed 2030, Marine Life 2030, and NOMECE implementation efforts. (COL)
14. Recent infrastructure funding (COL)