U.S. IOOS Advisory Committee
Hybrid Public Meeting
Meeting Minutes
January 20-21, 2026

Notification and Availability of Meeting Materials
The U.S. Integrated Ocean Observing System Advisory Committee (IOOS AC) was announced to the public by Federal Register Notice and on the IOOS Advisory Committee website. Meeting presentations and background material are posted on the website. Attendees participated both in-person at NOAA offices located at 1325 East-West Highway, Silver Spring, MD, and virtually.

IOOS Advisory Committee Members Present:
Debra Hernandez
Eric Anderson
Catherine Edwards
Glen Gawarkiewicz
Monty Graham
Eoin Howlett
Barb Kirkpatrick
Laura Lilly
Julio Morell
Nick Rome
Steve Woll

IOOS Advisory Committee Ex-Officio:
Kristen Yarincik, Executive Director, IOOS Association

IOOS Leadership and Staff in Attendance:
Jeff Payne, Acting Director, IOOS
Krisa Arzayus, DFO and Deputy Director, IOOS
Courtney Edwards, Program Analyst, IOOS
Laura Gewain, Executive Assistant to the Director, IOOS

Meeting Welcome and Administrative Updates
Krisa Arzayus, U.S. IOOS Advisory Committee Designated Federal Officer, and Deputy Director, NOAA's U.S. IOOS Office
Debra Hernandez, Chair, U.S. IOOS Advisory Committee

K. Arzayus convened the public meeting at 8:55 a.m. and welcomed attendees. She thanked the staff for their efforts in preparing for the meeting. She reviewed the agenda, overviewed her role as Designated Federal Officer, and discussed housekeeping matters.

D. Hernandez welcomed attendees. She laid out the meeting goals for the committee to identify a pathway to recommendations by the end of the fiscal year. She was excited to hear from the lineup of speakers, and expected great discussion during the working sessions.

U.S. IOOS Office Update
Jeff Payne, Acting Director, IOOS Office

J. Payne introduced the President's budget and Appropriation History.

Funding for the national program has been stable over the years. J. Payne noted that "stable" is not necessarily a good thing, as it implies a lack of growth, and inflation takes a cut out of what can be done with funding. The regional program has grown over the years since 2017, and has leveled off since 2022 at about $42.5 million, where it currently stands. The FY26 Senate and House marks for the regional programs are $43.5 million and $56 million respectively, with $47.7 million in the minibus.

For the FY26 President's budget request, the National Ocean Service had a level of $434 million, which is $250 million below the FY24 enacted level. The Navigation, Observations, Positioning number is down $34 million in the request, and the Regional Observations PPA was zeroed out.

There is a Continuing Resolution in effect until the end of January. There has been bicameral and bipartisan action on a minibus affecting certain agencies, which has not yet been signed by the President. The minibus sees increases in regional program funding, the first it has seen in quite some time. The national program gets its funding from the Navigation, Observations, Positioning PPA, which is at $184 million.

House and Senate markups had report language similar to the language of the last couple of years, including ocean planning and uncrewed systems. The target release for the FY27 budget is the first week of February. It is still being held close, and J. Payne has not seen it.

Work has been done with NOAA and the Department of Commerce on approval for fully funding the regional associations (RAs) for regional activities, including $7.3 million in external partner funds, primarily from NOAA.

Year 3 and 4 funding through the Bipartisan Infrastructure Law has been approved and allocated for replacement and modernization of equipment, among other activities. In the minibus, there are Year 5 balances, which are unobligated and destined to be reallocated.

The NOFO for the next five years of RA funding is at OMB. J. Payne said his office is working to keep the pressure on and engage with OMB to ensure things move as quickly as possible. If there is no NOFO, there is no mechanism to fund the RAs.

Authorization for ICOOS expired in 2025. There is bipartisan support in both chambers for a reauthorized ICOOS Act. Senators Wicker and Cantrell are the Senate sponsors for that chamber's bill, joined by Representatives Ezell and Bonamici on the House side.

There have been staff losses in NOAA and IOOS. NOAA has lost over a thousand people across the agency. IOOS lost 20% of staff through avenues like probationary, deferred resignation and

voluntary early retirement. Capacity and capability has been stressed significantly by these losses.

The IOOS Leadership Team engaged in an internal dialogue about its values, and came up with a Leadership Team Purpose Statement:

"The IOOS Leadership Team provides strategic vision and direction that advances the IOOS mission and impact across NOAA and the nation; fosters a collaborative, inclusive, respectful, and equitable office culture; models transparency and open communication with staff; and ensures cohesive, accountable execution of the IOOS mission — empowering staff, aligning priorities, and championing the program across NOAA and beyond."

J. Payne reviewed the IOOS priorities for FY 2026. Overall grants management, including the renewal of the new five-year NOFO, are a priority.

IOOS has spent much time on the Environmental Compliance process. About eight staff have been tasked to address this need.

IOOS aspires to maintain and improve the National Network of Regional Coastal Observing Systems, maximize impact and recognition of RCOS observations in NOAA, and strengthen partnerships. This is so IOOS can ensure that what it is doing is understood, well-known, valued, and put to good purposes within NOAA and externally. This includes the value of RAs' observations, how are they managed, and how IOOS can use partnerships to improve and provide greater value to recipients of data information services.

IOOS will support modeling and cloud computing. The modeling done by RAs must be connected to the modeling implementation plan within NOS. All offices involved must be engaged. IOOS is also the steward of the NOS sandbox for collaborative platform testing and evaluation. IOOS strives to integrate AI across large parts of NOAA and is interested in developing an IOOS AI strategy.

Challenges to program execution include an evolving approval process for grants and contracts and uncertainties around budget planning and zeroing out of certain areas. Workload and capacity remain issues, even as hiring has begun to pick up. The future of the Interagency Ocean Observation Committee is uncertain, as they have not been authorized to meet. Informal meetings have occurred, but there is a question out there as to their future and IOOS's role.

A Committee member asked if the office will be operating a full capacity with the proposed hires, or if it will still be at reduced capacity. J. Payne responded it will be reduced capacity, in part too because of the current budget level. Contract staff do offer some flexibility for hiring.

A Committee member asked about comparing the priorities stated by J. Payne to IOOS requirements. The NOFO and contracts are the top priority right now. DMAC is central to IOOS operations and IOOS is working with NOS on the modeling strategy. AI and maximizing impact of IOOS are opportunity spaces.

D. Hernandez asked about other challenges in next 6-12 months besides staffing. J. Payne would like to strengthen the relationship between IOOS office and RAs, be flexible with Administration changes, and work more with the IOOS Association.

NOAA Update and Discussion
Neil Jacobs, NOAA Administrator

N. Jacobs began with an overview of his academic and career history. He then presented a staffing plan and budget update. The FY27 budget request will likely be similar to requests from previous years. The hiring plan has been approved, with several hundred positions opening up, focusing on early career technical experts. Many fellows can be quickly turned into federal employees, allowing for expedient onboarding.

Improving morale and visiting NOAA facilities around the country are top priorities for N. Jacobs.

NOAA is examining potential reorganizations to streamline processes within NOAA. They are not being forced from the top down, but they are being looked at to see if they make sense.

N. Jacobs is concerned with branding and marketing. He wants NOAA to have more name recognition, like the National Weather Service. There are two paths to brand recognition: understanding NOAA's mission on Capitol Hill and understanding NOAA's mission with regular constituents.

N. Jacobs wants to leverage NOAA's data as a strategic asset to get discounted storage. NOAA’s data is very valuable, and cloud service providers want to host it. He also wants to grow the number of observations and data NOAA has in the most cost effective way.

Handling HR issues like payroll and enterprise services is a priority. He wants to optimize NOAA facility's footprint, noting the backlog of maintenance and prioritizing what most needs to be repaired.

The research-to-operations transition is a major headache for NOAA. There are many reasons an initiative might stay in research rather than moving to operations, and N. Jacobs wants to prioritize things that have an operational endgame to help fulfill mission requirements. Before a commitment to investment in research is made, it must be assessed whether or not the concept stands a chance at all of making it to operations.

Fisheries topics that are a priority include aquaculture, electronic catch monitoring, modernization of surveys through autonomous systems and baseline trawl data, and using eDNA. There is also a need to focus on recreational fishing issues, not just commercial fishery issues.

N. Jacobs would like to look at the return on investment in programs like NERRS and National Marine Sanctuaries, noting the ROI is probably higher than the stated direct impacts and may not include some indirect economic benefit.

There is a model consolidation plan at the National Weather Service, with a goal of getting the number of models down from 22 to eight. N. Jacobs believes it can be reduced to one. A GPU-based system will be more efficient. In 5-10 years, NOAA could use physics-based ensembles to generate a training data set, with the actual prognostic system being AI-based.

N. Jacobs spoke of an initiative to move the Advanced Weather Interactive Processing System (AWIPS) to the cloud, which currently runs on a desktop workstation with a laborious downloading process. The entire HPC stack may also be moved to the cloud at the same time. A move to cloud technology can also greatly save time and allow for multiple experiments in parallel.

There is an initiative to rethink NWS watches and warnings and modernize NOAA Weather Radio. Radio spectrum is a finite resource. He urged the modernization of radar and the use of autonomous systems in the ocean and in the sky.

Managing NOAA's list of requirements is a major priority for N. Jacobs. The first steps in this process have been done, and a list of requirements exists. There are currently 9,200 consolidated observation user requirements on the list, which are being fed into a new system called Earth Observation Requirement Evaluation System (EORES). Requirements should come directly from Congress and legislation, even if vague. It will have to be decided what actually constitutes a requirement; many old requirements are made obsolete by newer ones, but are not removed. There may be an opportunity for the Committee to help prioritize observing system requirements. This will be reflected in the NOFO, in terms of down selecting and consolidating models. N. Jacobs is interested in access to international data and observations through data-sharing agreements or global asset deployment.

G. Gawarkiewicz mentioned how rapidly the ocean is changing, while quotas for commercial fishing are often set three years in advance. What are N. Jacobs's thoughts about dynamic ocean management?

N. Jacobs said the NOAA is required to do stock assessments to determine the catch limits and quotas, but it is up to NOAA how they do it. There is a lot of flexibility. How that data gets integrated into distribution of quotas is likely an issue of negotiations through treaties with other countries, and is more political than scientific.

D. Hernandez asked what is working well and what is challenging regarding acquisition of observations. N. Jacobs said two things could be improved: awareness of access to observations across different line offices, and doing a fair cost comparison between NOAA's investment and deployment of its own observation versus a commercial company. If the latter, there may be a benefit to NOAA restricting redistribution of data collected by the commercial company and then if that company can then resell the data, it will drive down the cost for NOAA. Every

company has different level of data redistributing restrictions. For the former, there is a need to understand the true cost for NOAA to purchase, deploy, and operate observing equipment, including data distribution.

E. Howlett asked if he was correct in his belief that NOAA is an early adopter of cloud technology and AI. N. Jacobs said NOAA was an early adopter for a government agency, but was late to the party compared to industry. That is okay, as NOAA's risk posture is different than a private business's. N. Jacobs does not see NOAA developing its own AI, but he wants NOAA to adopt practices using open-source code that is out there. He does not think AI will completely replace physic-based models, but rather NOAA will be using AI to optimize physics-based models.

D. Hernandez asked if there was anything the Committee, which is mostly outside the federal space, can help NOAA with. N. Jacobs said he appreciated advocacy on Capitol Hill, and articulating the return on investment for what NOAA's work brings. He has tried to make the case in the past that there is a ROI by cost avoidance, where better forecasts provide better warnings to prevent expensive damage. This is a difficult message for Congress to message to their constituents.

N. Rome said the committee's charter is to advise the NOAA Administrator and the interagency committee, and he asked N. Jacobs how he thinks the committee should spend its time on the interagency committee to generate the most value. He also asked if there are any conversations being had about working across agencies on consolidation of requirements. N. Jacobs said yes, but each agency's requirements can be a challenge to cooperation. There are also not many places to do interagency convening. He advised the Committee to take a look at the various modeling systems that are used and assess their strengths and weaknesses, thinking about potential sunsetting for models that don’t work and elevation for those that do. The board could also look to establish consistency with observing systems across various regions.

D. Hernandez asked about the vision for the scope of NOAA modeling and how local demand for high resolution models fit into that vision. N. Jacobs said there are delineated lanes for where NOAA, NWS, and industry can exist, which can affect competition. The IOOS authorizing language includes incorporating stakeholder needs as a requirement, which is tricky. NOAA's mandate is to protect life and property, and advance the national economy. Many expect this to mean "do more." Sometimes, the economy can be enhanced by government stepping out the market so as not to depress industry.

After the presentation, a brief video was played about the Accelerator program.

NOS Modeling
Rachael Dempsey, NOS Deputy Assistant Administrator

R. Dempsey started with an overview of NOS modeling. Nearly every aspect of NOS's mission benefits from its ability to predict the future state of physical, biological, and chemical conditions

in estuaries, lakes, and oceans. Modeling outputs are only useful if they meet the needs of users and are delivered in a manner that supports sound decision-making.

NOS currently offers about 25 individual regional models with their own histories and base requirements. NOS developed a modeling vision and strategy to align NOS to move toward a direction of unity and a cohesive modeling system. It is no longer looking at 25 different products, but at one cohesive modeling suite to serve the nation. The Modeling Implementation Plan was released in 2025 to achieve the end goals of this streamlining strategy.

NOS works with external modeling communities, including academia, private industry, and regional experts like the Regional Associations (RAs), to sustain and improve forecasting models. Some funding for community developers comes through the IOOS RAs, ensuring that the people developing the next generation of code are the ones most familiar with the local coastal challenges at issue. Without the ability to fund models via IOOS, advancement at NOS would not be possible.

NOS must keep pace with technological advancements and innovations to bring accurate and timely predictions to end users. NOS's commitment to open, machine-readable, real-time outputs ensures that communities, businesses, and researchers can access data and forecasts to solve problems.

Emergency response requires awareness of current and predicted environmental conditions to inform search and rescue and mitigate pollutants accidentally released into the coastal environment. Coastal managers require information about changing coastal conditions to understand risks and plan for the future. They also need predictive information about harmful algal blooms and pathogens to make public health decisions. Maritime communities need predictions for environmental conditions and seaports and waterways to optimize routing and perform safe port operations. Skillful modeling and predictions are key to all these missions and must address time and spatial scale requirements of the end user. Models have been developed with the wider community, often through open-source models, which have enabled NOS to contribute to a larger NOAA initiative that improves the efficiency of agency capabilities.

No one office has responsibility for the entire mission, all contribute. NOS relies on a stream of observing systems from NOAA partners. IOOS RAs are critical, providing localized high-res in situ data to fill the gaps in national coverage. Data from the various federal and non-federal systems drive the models and validate their accuracy.

NOS core modeling systems are open-source and actively supported and updated by the ocean modeling community. They deliver NOS products and services where and when users need them. The four major models are the Advanced Circulation Model (AdCirc), the Semi-implicit Cross-scale Hydroscience Integrated System (SCHISM), the Regional Ocean Modeling System (ROMS), and the Finite Value Community Ocean Model (FVCOM). Each model is also affiliated with IOOS RAs or academic partners under cooperative agreements.

AdCirc and SCHISM-based models have helped with precision navigation, as they are embedded in portable pilot units to help captains safely guide ships into port, providing data such as water level, current speed, direction, water temperature, and salinity. This is important from a commerce perspective and can provide useful for vessel loaders, as one extra inch of water can allow for millions of dollars' worth of extra cargo.

In Lake Erie, Harmful Algal Bloom (HAB) models predict and monitor dangerous algal or cyanobacteria blooms and allow local leaders to minimize impacts to public health and coastal economies. Daily updates track bloom position and likely mixing based on satellite and in situ observation, allowing municipalities to make decision on when to change to more advanced and costly water treatment methods or restrict access to water.

NOAA is responsible for scientific support to the Federal coordinator for oil and hazardous spills. The General NOAA Operational Modeling Environment (GNOME) is used to support the Coast Guard during maritime accidents and environmental emergencies. It uses multiple models and provides weather, current, and wind data to inform spill mitigation decisions and protect natural resources. GNOME has also been used to track debris from the 2013 tsunami and nuclear meltdown in Japan.

NOS must continue to efficiently innovate using the latest technologies, and it is focused on three priorities: consolidating the modeling suite while improving responsiveness to user requirements, building coupled systems for compound threats, and integrating the UFS framework for NOS operational models. There has already been some success through the UFS Coastal Collaborative Effort. NOS, OAR, NWS, and academic partners such as IOOS's partners have been working together to demonstrate rapid development while leveraging the UFS framework to integrate various coastal ocean model components.

To embrace emerging technologies, NOS will develop AI/machine learning capabilities to dramatically increase model efficiency and enhance, data access, leverage GPU computing to enable faster, higher-resolution, and probabilistic forecasts, and increase its use of Cloud operations. OceanAI is a chat agent to facilitate access to and answer questions about NOAA water level data.

IOOS has developed a cloud sandbox to ease assess and analysis of model output for testing cloud native model operations. NECOFS, SECOFS, and ECCOFS are all being implemented through the sandbox to facilitate transition to NOAA, which is a key step in the model consolidation.

NOS must sustain investment in observations and advanced technology, continue collaboration and alignment across federal agencies and the broader, modeling community, and continue advocacy to champion a unified, strategic modeling direction across NOAA.

D. Hernandez asked about any specific opportunities for the Committee to hear about in terms of moving the Implementation Plan forward. R. Dempsey responded that they are refining their gap analysis to have solid basis for formulating requirements being gathered from partners and

balance with Congressional requirements. An announcement will come later on this for potential Committee engagement.

In response to question from G. Gawarkiewicz about AI, R. Dempsey said that in order to include AI as part of the next steps for NOS, as much data as possible is required.

An unmanned systems group within NOAA is trying to make unmanned systems more available and encourage their use throughout NOAA. Unmanned systems have been very successful in supporting accuracy of tropical cyclone forecasting. The new Class-C vessels set to be delivered around 2028 will include accommodation of unnamed vessels. D. Hernandez remarked that there was a lot of infrastructure in the unmanned systems, and asked how the balance of shared capacity within and without NOAA works around uncrewed systems. R. Dempsey said that many risks and costs are assumed by industry on NOAA's behalf.

M. Graham asked about the inclusion of NMFS in the coupling of physical and biological systems discussions. R. Dempsey recently met with NMFS about this. There is a recognition that one HAB forecast does not equate all HAB forecasts, not only because of the physics but also the biology aspects.

R. Dempsey said that each model has its own requirements and developmental processes. Some of them are relics, using very old model code that is now far outdated. Part of that consolidation underway right now is representative of that. NOS is trying to get everything on the same core model. There is an opportunity for core models to become one “super model”, which is where the requirements gathering pieces comes in.

E. Howlett touted the success of the IOOS model being adopted by NOS. He asked if any progress has been made on streamlining the operational process. R. Dempsey said NOS needs to get better on this front, noting one example with GLERL that took 15 years. When she arrived at NOAA, she learned that modeling was not managed by cost, schedule, or outcome. There were a lot of stovepipes. NOS needs to demonstrate requirement to output. A framework for program management of modeling is in the works. E. Howlett asked how strategic the relationship is between NOS and the RAs in terms of modeling needs. R. Dempsey responded that the goal is to give specific guidance to the RAs on what NOAA’s needs are.

Ocean Enterprise Finance
Zack Baize, Ocean Enterprise Program Manager, IOOS Office
Hans VanSumeren, Senior Director, Ocean Enterprise Initiative, Marine Technology Society

Z. Baize noted that the United States is a maritime nation, with one of the largest EEZs in the world. As of the most recent data, the U.S. has over $827 billion in maritime economic output. NOAA is trying to understand its role and the role of ocean data in the ocean economy and how it can work with partners to provide support. In February 2026, the Ocean Enterprise team will be releasing the 2025 3rd iteration of the Ocean Enterprise Study, highlighting the economic

growth and evolution of the Ocean Enterprise as a major contributor to the overall U.S. ocean economy.

The purpose of Ocean Enterprise Initiative is to bring together government and industry stakeholders to spearhead innovation, strengthen public-private partnerships, and increase economic development within the Ocean Enterprise and wider ocean economy.

H. VanSumeren noted that while NOAA and MTS have been partners for decades, about 3-4 years ago the dialogues with industry series was started, which brought together entities from government, private sector, and non-profit to convene around the ocean information value chain.

Marine Technology Society is over 60 years old, founded with industry as a key partner, as industry is the key driver of durable growth in the ocean economy. It has over 2,500 members and over 80 corporate members. Its goal is providing support for technology innovation, aligning public and private investment, and looking at growing the ocean technology economy. He highlighted workforce development through youth outreach, early career development, and a new microcredentialing program to align the workforce with new opportunities.

Ocean Exchange is an accelerator that joined MTS last July. It has been a large catalyst for growth among ocean economy startups. It has given out $2.9 million of non-diluted funds to startup, leading to $3 billion in follow-on investment. All five of the finalists for their Neptune award were NOAA Ocean Enterprise Accelerator graduates.

NOAA's role in the public-private partnership is to provide data and a clear regulatory framework, ensure resource stability and management, providing needs and requirements, and supporting innovation/entrepreneurship. NOAA, as a part of the Department of Commerce, has an obligation to encourage and support innovation and entrepreneurship.

Z. Baize said there are two elements to industry engagement and market growth approach. The first is customer discovery through dialogue with industry, among other methods, to learn more about opportunities and challenges. Then the second element is to take that information and develop or tailor solutions. This helps NOAA ensure that its programs are informed by and supporting the challenges identified by customers.

Dialogues with industry are global conversations bringing in the entire ocean enterprise landscape. It is not a scientific conversation; it is meant for actionable recommendations. These conversations turn into publications that highlight where further dialogue is needed. The publications can be used on other types of programming, such as webinars to support an accelerator community.

The Dialogues series can lead to further conversations, such as the TechSurge events. These are single-topic focus areas events bring in diverse audiences and result in tangible actions

BlueConneX is a global platform for connecting the community to the resources and information needed to make good business decisions. It is meant to look at the bigger picture at a macro

level, rather than connecting a specific investor to a specific product. It will be launched live on March 10. The platform leverages AI to collect and synthesize information. Users do not have to navigate through information; the AI scraping will provide the best and most relevant information. Users can curate and bookmark their own collections.

NOAA is providing a combined total of $60 million in funding to the Ocean Enterprise Accelerator program over the course of 4 years to support businesses developing and commercializing new ocean products and services related to NOAA's mission in support of U.S. economic and security goals. There are four accelerators being funded: StartBlue, VentureWell, The Continuum, and gener8tor, with projects spread out across 30 states. Partnerships include the U.S. Southern Command, the IOOS Association, and S2G Ventures. NOAA has awarded $54.3 million to these accelerator programs in Phase 2. 125 unique businesses have been supported through 2025 accelerator programs.

Ocean Finance has begun to engage the finance community through dialogues and other initiatives. There is a high level of interest in ocean technology and investment opportunities, there is not a lot of expertise on what the opportunities are and how they can be financed. Z. Baize has put together a white paper on ways ocean finance can leverage investment.

H. VanSumeren ended by highlighting a recent and upcoming Ocean Enterprise Finance convenings. Oceans25-Chicago focused on the gap in funding in a middle space of the development process when things may slow down and how to ensure the entire spectrum of financial needs are covered for new businesses. EarthX E-Capital Summit will be a full-day forum to bring together leaders across the enterprise.

G. Gawarkiewicz highlighted the importance of interpersonal relationships that those in academia may not be able to prioritize, and asked if the enterprise will consider this. H. VanSumeren replied that the soft skills are part of the micro-credentialling by emphasizing team interactive environments needed for these platforms. Z. Baize added that the soft skills are also incorporated in the accelerators.

L. Lilly asked if the focus areas evolve over time, to which Z. Baize said they do evolve.

IOOS Private Sector Engagement
Tiffany Vance, Ocean Technology Transition Program Manager, IOOS Office
Zack Baize, Ocean Enterprise Program Manager, IOOS Office

T. Vance said IOOS is both a data consumer and a service consumer. It consumes data through buying data via support for RAs, and consumes service through reliance on technical expertise. RAs provide information via their web pages and services that the IOOS office then aggregates via Model Viewer, Sensor Map, HFRNet, etc.

IOOS provides data to industries such as shipping and aquaculture, and it also funds development, testing, and use of new technologies via OTT, Ocean Accelerators, Synchro, and

RA use of emerging technologies. She referenced the 2025 NOPP Ocean Life Forum, which focused on improving observations of marine life thought technology and innovation.

The OTT works to take new technologies for which there is already an operational requirement and a commitment to integration and use and move them toward operations. Transitioning to operations will result in improved ocean, coastal, and Great Lakes observing capabilities to improve environmental intelligence for decision making. The OTT program is about $2.75M/year since 2013. IRA funding provided the opportunity for seven one-time funded projects for $8M total.

OTT focuses include low-cost sensors to fill data gaps and lower the barrier to entry for new markets and developers; automating, interpreting, and applying data through machine learning and artificial intelligence; using improved sensors to address water quality issues like harmful algal blooms and hypoxia; and observing physical oceanographic variables like salinity, surface currents, temperature, tides, and waves to support stakeholders and missions.

The majority of current OTT projects have a non-governmental partner, which includes industry and non-profits. OTT-funded projects that have made the successful transition to operation include the Environmental Sampling Processor, a HAB detecting tool; sensors in crab traps to automate the collection of dissolved oxygen data; and the Autonomous Surface Vehicle CO2 Sensor, is now being manufactured by Saildrone.

Z. Baize presented on the Ocean Enterprise Accelerators, which support the development and commercialization of new ocean technologies, data products, and services for economic and societal benefit to the U.S. ocean economy. The system is part of a larger industry engagement portfolio, the NOAA/Marine Technology Society Ocean Enterprise Initiative. NOAA is providing about $60M over about 4 years. Phase 1 has taken place, which provided about $4M to 16 different organizations, which then was downselected to 4 organizations, one of which was an amalgamation of multiple groups. He talked about the importance of bridging the "valley of death," the funding and support gap that exists on the road between an idea's existence in government and accelerators and its progression to a commercial-stage place in the private sector. Z. Baise described this as achieving "commercial exit velocity," which requires public/private cooperation through de-risking, joint funding, shared expertise, and policy alignment to ensure a strategic handoff.

The four Ocean Enterprise Accelerators are not meant to be focused exclusively on any particular area, but the one led by gener8tor is probably the most specific, focused on the Great Lakes and fresh water. StartBlue, VentureWell, and The Continuum do many of the same things, but at different levels of scale. They have various tiers that enterprises can progress through on their way to viability. Technology areas of focus for the Ocean Enterprise Accelerators include navigation, water quality, forecasting, aquaculture, and data integration. Many cohort companies involve AI and machine learning, and a continued focus in these areas is anticipated.

Early cohort companies include SunFish AI, which leverages AI and simultaneous localization mapping, and recently signed a $2.6 million contract with the State of Florida. Dirac Labs works on a quantum navigation and detection platform for GPS-denied subsurface applications.

The success metrics for OEA participants: the number of ventures ready for market entry, follow-on funding being secured, including federal grants; a large and diverse array of filed patents, and a portfolio of commercialized technologies that address ocean economy use cases. For example, Dirac Lab has partnered with the Air Force to apply quantum navigation in the event of GPS hacking or jamming. It has also secured a partnership with Nvidia after raising over $800,000 in a pre-seed investment round.

T. Vance said the IOOS RAs are an integral part of OTT projects. They act as principals, participants, and transition managers. Much depends on getting NOFOs through the approval process, but a lot can be done once that is completed. The OEA program is currently funded by Inflation Reduction Act appropriations. The Ocean Regional Opportunity and Innovation Act, currently on the Hill, would fund the OEA projects if they were delegated to IOOS. Accelerators highlight a foundation of the type of work that the Act is seeking to authorize and appropriate. Demonstrated success leads to continued funding, and there is an ongoing effort to articulate the success of the program through metrics identified in the presentations. Ocean Enterprise Accelerators will also be attending EarthX E-Capital Summit in April.

M. Graham asked about selection bias in accelerator programs, and how it can be determined that accelerators are capable of producing positive results for entities, as opposed to simply recruiting the top entities that would succeed anyway. Z. Baize said that is hard for entities at the moment, even those considered top tier, due to the lack of risk tolerance among private capital. He noted the focus on projects that align with mission, rather than company potential. For OTT, T. Vance added that she aims to have a broad set of expertise in the merit review process for proposals. There is also a stipulation that a proposal can not be a continuation of a previous proposal.

G. Gawarkiewicz asked how to learn what investors are looking for. Z. Baize said there is exactly what the OEA program aims to do. He also recommended reviewing the Dialogues with Industry reports.

N. Rome asked how the committee could use its influence to further the presenters' mission. Z. Baise said that continued advocacy is a good start, and that the regional associations are a great network. Continued regional integration with accelerators will be very helpful. T. Vance agreed and added that a requirement for OTT is to work with an RA. K. Arzayus added that OEA funding is finite, so if the Committee feels it is something NOAA should continue with, that could be a recommendation.

Working Session

D. Hernandez said the goal of the session is to reflect on the presentations heard today and hear report outs by the chairs of the two working groups. K. Arzayus added that the goal is to develop

recommendations by the end of the fiscal year so that the Committee doesn't go two years without any recommendations.

The committee talked about the role of the IOOC, which they can make recommendations to, but is not currently meeting. N. Rome met with the current co-chair of the IOOC, and believes the Committee would need to make the case for reinstituting the IOOC. This could be done by stating the IOOC could help advance whatever priorities the Committee recommends. D. Hernandez said that all partnerships are in some way inefficient, but what they get you is more sustainability. B. Kirkpatrick recalled that IOOS has lost 20% of its staff, including some key players, and that this downsizing is across the board, affecting multiple agencies. Dr. Jacobs spoke of hiring early-career individuals and technical experience. B. Kirkpatrick talked about the agency losing historical knowledge. The agencies could come together to allow each to replace pieces they have lost. S. Woll said the argument in support of increased partnership is an easy argument to make, citing elimination of redundancy between agencies.

G. Gawarkiewicz found N. Jacob's comments about the future of physics-based models in tandem with AI interesting. The role of subsurface data and AI is important and cuts across all the RAs. It was emphasized that observations as initial data input are still critical for improving the forecasting.

D. Hernandez asked if there was anyone at NOAA who would know where more observations are needed to improve forecasting. The NOSC is intended to both evaluate requirements and data gaps. This could be a good informational briefing in the future.

There was a discussion about identifying requirements specific to IOOS and being involved in the saving or consolidation of those requirements. IOOS staff have previously been involved. K. Arzayus noted that currently IOOS is characterized through 3 observing systems of record: gliders, HF Radar, and a catch-all for regional observations. There is an acknowledgment that the latter should be more discreet, which the Committee could help with

K. Yarincik said there is an Inflation Reduction Act, project to examine user engagement, stakeholder needs, and how they translate to requirements. If there was some transparency into the internal regulation process, that would help better define what the project looks like. S. Woll asked if this includes data gaps. While the full scope of the project hasn't been fully defined, it was intended more as service gaps.

M. Graham said IOOS can possibly play a role in developing credits markets around carbon. Deep-sea biodiversity will also be a big issue. These issues depend on the credibility of measurements, and IOOS is in a good position, because they possess built-in trust and has the ability to extend deeper than just physical measurements. L. Lilly encouraged consideration of return on investments. C. Edwards added that capturing the indirect value for ROI is difficult and not as well known. RAs provide value through certification, and that means something in sending data. IOOS can help NOAA reclaim their status as an honest data broker, further cementing the value of IOOS.

G. Gawarkiewicz asked how IOOS can create tools to measure biodiversity and help IOOS become a certifier in that area. M. Graham said that there are many groups, including NGOs, measuring biodiversity, and they want their information to be defensible to prevent fraud. IOOS can play a large role in defining data. D. Hernandez reminded the Committee that both N. Jacobs and R. Dempsey said cost was the factor to determine federal versus non-federal investments in accomplishing NOAA's mission. She wondered if there could be a recommendation here about how exactly to calculate those costs to have a fair comparison. There was further discussion about the difficulty of this and how the business model for private sector versus government are very different.

E. Howlett asked about the process for developing the IOOS leadership mission statement, noting that it was long and potentially needed some focused priorities.

S. Woll provided the update for the public-private partnerships preparatory working group. The group had one meeting in August, and laid out a timeline interrupted by the shutdown. It laid out themes to investigate, including: IOOS private sector engagement and the National Mesonet Program (both accomplished at this meeting), Fugro, large-scale beneficiaries like energy and insurance companies and how they could provide funding, citizen science initiatives, and foundation-level grantors who can support, incubate, and coordinate private investment. One of the issues with private sector is that the data will be far more heterogeneous.

The three top topics for the group are data buys, citizen science and R2O. Mr. Woll said that, given funding cuts, NOAA will have to leverage the private sector and find the best or "least worst" way to do it. There is a need for NOAA to establish what it is and is not going to do, so that private sector can plan accordingly.

Having heard about the extent of private sector work already taking place in IOOS, particularly with the Accelerators, it was discussed whether this is the type of work NOAA and/or IOOS should continue doing. S. Woll reminded the group that NOAA is a part of the Department of Commerce, the mission of which is to stimulate economic activity. He says job creation merits long-term consideration, but acknowledged questions regarding whether this is IOOS's responsibility or that of NOAA in general.

E. Howlett and C. Edwards gave the update for the second working group on AI. The group had several productive briefings, highlighting AI pilot projects and how quickly NOAA is becoming AI-ready. The group received a briefing from the program office and various AI projects going on around the regions.

C. Edwards echoed approval of the briefings, and said that the group has noticed the importance of modeling and data management. It had some focus on AI-ready data and what that requires in terms of metadata and IOOS's responsibilities in contribution and definition. The committee discussed parallels to the weather sphere, which is further down the road in AI-based modeling and forecasting. The ocean world and the weather world are different, however, in areas such as scale and measurement taking. Dealing with uncertainties and data attribution were other topics identified.

B. Kirkpatrick noted the NOAA AI Strategic Plan was from 2021-2025, asking what was accomplished during that time and if an updated plan would be developed.

G. Gawarkiewicz asked about AI's effect on workplace development and staff retention. N. Rome suggested a recommendation such as ensuring observing capacity is somewhat AI-ready. D. Hernandez was optimistic about readiness. There was discussion about regional versus national DMAC efforts. Some local stakeholders don't like the national data portals. E. Howlett said the future of the human-computer interface is in chat, and so the question is whether or not the current architecture can accommodate that. He does not believe higher-ups need any input from the committee in terms of AI.

M. Graham said AI can bridge the gap between models and data by helping IOOS data providers know where to go to collect samples. He wants to see AI used informatively, not just generatively. There was discussion as to if AI could be used to identify data gaps, navigating individual stakeholder needs. N. Rome asked if this could be a recommendation for the IOOC, to explore if AI could be used for this purpose.

D. Hernandez asked the Committee about next steps on the this PWG, in terms of continuation, modification, or dissolving. S. Woll suggested a recommendation on encouraging NOAA to be more vocal about what it is doing and plans to do in the AI space.

G. Gawarkiewicz asked if different RAs have different emphases regarding AI. Finding areas of optimization are important, but the answers may be regional rather than national. He suggested that early successes various RAs have had with AI could be used for marketing and branding. D. Hernandez added that she thought the IOOS office has done well to incorporate what the RAs are doing in the broader NOAA AI strategy. E. Howlett said that Dr. Jacobs has a modern vision around AI and commercial cloud, going hard in that direction, and it is important for RAs to align with that strategy.

C. Edwards asked if there was anything the working group should re-task to, considering that AI is so embedded in NOAA's current work. D. Hernandez suggested tabling this topic until the next meeting. The value of branding and marketing was reiterated again. D. Hernandez said her organization is scoping out a chat feature to inquire its data, and there is question as to whether they can afford it, as hits to the chat can add up to prohibitive cost. E. Howlett said financing AI is a real challenge because the number of hits is not fixed, making it hard to budget for. Guardrails can be erected, and users can be limited, but cost is still something to look out for.

Future topics for the working group were floated, and it was determined that the Committee members should submit a list of 1-3 of their top topics for consideration for tomorrow's discussion.

Public Comment Period

There were no public comments.

Day 1 Adjournment

The meeting was adjourned for the day at 5:00 p.m.

Welcome
Krisa Arzayus, U.S. IOOS Advisory Committee Designated Federal Officer, and Deputy Director, NOAA's U.S. IOOS Office

K. Arzayus convened Day 2 of the public meeting at 8:57 a.m. and discussed housekeeping matters. D. Hernandez welcomed attendees and said that today's discussion would continue to hone in on priorities for the committee to focus on in the next six months. The goal is to discuss recommendations at the next committee meeting in the summer and have them completed by the end of the fiscal year.

NOAA Mesonet
Curtis Marshall, Director, Commercial Data Program, NWS

C. Marshall explained that the National Weather Service's Commercial Data Program (CDP) is a data buy program, meaning that it purchases data from networks that are not owned and operated by the federal government, including states and various private sector organizations. The National Mesonet Program (NMP) is the largest element of the Commercial Data Program, encompassing a wide variety of observing systems, and works in concert with other elements such as the Aircraft Based Observations program (ABO) and the Meteorological Assimilation Data Ingest System (MADIS). C. Marshall noted that the CDP is separate from the National Environmental Satellite, Data, and Information Service (NESDIS) Commercial Weather Data Pilot, which is limited to commercial satellite data. The CDP Program Office was stood up in NWS in 2024 under the Surface and Upper Air Division (SUAD) within the Office of Observations (OBS). As of fiscal year (FY) 2025, approximately $42 million is obligated to the Commercial Data Program. The pending reauthorization of the Weather Act legislatively codifies CDP, authorizes NMP and ABO, and grows the budget to $100 million by FY28. In addition to data buy contracts, CDP uses vehicles like grants, Cooperative Research and Development Agreements (CRADAs) and existing NOAA elements to support pilot projects that inform CDP contracts requirements for program growth.

The NWS and OBS have historically been structured around lifecycle deployment and operations of federal systems. Congress has indicated a desire for NWS and NOAA to substantially integrate commercial data with its overall observing systems capabilities. CDP was established in OBS to provide an opportunity to leverage nonfederal capabilities and fill gaps. The NMP is comprised of a broad mix of observing systems well beyond the traditional weather enterprise understanding of the term "mesonet" (a portmanteau of "mesoscale network"). These include 60 non-federal partners providing observational data under contract, with approximately 40 state mesonets, 7,500 sites, and tens of thousands more via private networks and Synoptic API; gap filling x-band radars; coastal and marine high seas data from Sofar and Weatherflow; commercial weather balloons; unmanned aircraft systems (UAS); the Upper Missouri River

Basin Snowpack/Soil Moisture Pilot; Special Community Projects to build new networks and capacity; and aircraft-based observations (in addition to the ABO component).

C. Marshall presented recent highlights from the NMP. During Hurricane Helene, the Georgia and North Carolina mesonets were able to provide key verifying pressure and wind observations, using data to improve situational awareness in real time. In Oklahoma, the state mesonet is using UAS to deliver atmospheric profiles to the NWS to improve short-term weather prediction, with flights up to 10,000 feet. The Global Sounding Balloon (GSB) platform is using artificial intelligence (AI) to move their controllable, long-duration weather balloon to desired locations, and using their data for AI-based forecasting. In 2025, Sofar's drifting buoys were able to observe significant wave heights of nearly 12 meters inside Hurricane Erin, and another program partner, Climavision, provided radar data that is integrated into the Advanced Weather Interactive Processing System (AWIPS) and the Multi-Radar/Multi-Sensor System (MRMS). NMP has a CRADA with three collaborators in North Dakota to explore the utility of UAS profiles in an integrated upper-air network with the Department of Defense (DOD). Following FY23 and FY24 congressional direction for installation of water vapor sensors on commercial aircraft under NMP, a contract was awarded to FLYHT for installation of sensors on WestJet, with additional funding for 20 more sensors. C. Marshall also summarized recent developments from other CDP components such as ABO, GPS-Met, Lightning, and MADIS, and highlighted the global importance of aircraft-based data, which is the most important source of data for high resolution numerical weather prediction.

Programmatically, the Mesonet Data Buy Contract is a multiyear single award Indefinite Delivery, Indefinite Quantity (IDIQ) contract currently held by KBR, with the 60 participating mesonets operating as subcontractors to a prime. A recompete is currently underway. C. Marshall noted that the key concerns with data commercialization are the rights to data ownership and access, and there is a tradeoff between data rights and price. NMP is a public-private academic partnership (PPAP) with "NOAA only" redistribution rights enabling networks access to multiple markets. The exceptions to this are vertical profile data that are valuable to global numerical weather prediction, which are shared intergovernmentally with major weather services around the world. The ABO is a global cost sharing mechanism in the World Meteorological Organization (WMO) Global Programme framework and follows the redistribution and data rights under WMO Resolution 40. Looking forward to the continued expansion of data buy and NMP's evolution into a commercial-based enterprise, C. Marshall noted that several members of the current political NOAA leadership come from the world of commercial data buy and are supportive of the program. He added that the distinction between what is federally versus commercially owned and operated is breaking down as commercial buys take over a larger share of observing systems, and this transition brings with it questions about data access, fairness and equity, science, and public safety.

S. Woll asked if CDP would be shifted from an NWS level to a NOAA level. C. Marshall said that early versions of the Weather Act reauthorization included language about creating a NOAA-level entity for a commercial data program. He emphasized the need to balance visibility with proximity to operations to be able to run and execute a program. A reorganization of the NWS is anticipated, and CDP may be moved up several levels on the organizational chart. C.

Edwards asked how detailed the contracts were with commercial entities and how much independence the entities have in executing them. C. Marshall said that as the program and congressional direction have evolved, there is a balance between getting a good price point and incentivizing the commercial entities to build to the standards that NOAA needs to fill gaps. The Weather Act reauthorization includes a capacity building component for CDP, and it may grow into something that awards contracts for non-federal entities to build networks, rather than buying whatever data is already available.

E. Howlett asked if CDP's relationship with the data providers was a partnership or a vendor-buyer relationship. C. Marshall said that as a legal matter it is a contractual vendor relationship, but in a cultural and practical sense it is a partnership. D. Hernandez asked how the program manages quality assurance and quality control (QA/QC) of the data. C. Marshall said that there were multiple layers; the contract itself has detailed quality requirements, and most of the networks also have their own rigorous internal processes. Synoptic's systems perform QA/QC before they send data to the program, and MADIS has its own checks, as do certain applications. D. Hernandez asked about biases in sensors, and C. Marshall said that an observation can be biased, but if you can correct the bias, it's still a good observation. One component of numerical weather prediction is characterizing error in observations.

G. Gawarkiewicz noted that publications like the Journal of Geophysical Research: Oceans requires the data used in published papers to be publicly available. He asked where that might fit into commercialization of data. C. Marshall said that there were tiers of data rights, and most networks will agree to contribute a discrete chunk of data to become free and open for academic research purposes. G. Gawarkiewicz said that he was impressed with the integration of data with modeling and forecasting efforts. C. Marshall commented that AI models might be able to make use of surface data that is too noisy for legacy numerical weather prediction.

Overview of New Role
Ruth Perry, Acting Principal Deputy Assistant Secretary and Deputy Assistant Secretary for Ocean, Fisheries, and Polar Affairs in the Bureau of Oceans and International Environmental and Scientific Affairs, Department of State

R. Perry spoke about her role at the Department of State, which she characterized as dealing with every aspect of international diplomacy from deep seas to space and the land in between. This includes a wide range of subject areas such as deep sea mining, international fisheries management agreements, work conducted with the National Science Foundation (NSF) under the Antarctic Treaty, biodiversity, plastics, and commercial diplomacy in space. The State Department's reorganization was completed in August of 2025 and resulted in the reduction or transition of most climate science and diplomacy work out of the Bureau of Oceans and International Environmental and Scientific Affairs (OES). The agency is also in the process of transitioning and reprogramming funds from the U.S. Agency for International Development (USAID), many of which are being dispersed through OES.

R. Perry listed several OES priorities under the current administration, including space; deep sea mining; fisheries management, particularly illegal, unreported and unregulated (IUU) fishing;

and marine carbon dioxide removal (mCDR). She noted that the administration is interested in an economic balanced co-use approach to protected resources management versus a conservation approach. They are working to capitalize on economic diplomacy, positioning U.S. industries and sectors abroad in the ocean space with fisheries and ocean technology, including using the U.S. technology sector to close the gap across IUU fishing. Other priorities are improving coordination between the State Department, Coast Guard, DOD, and NOAA on IUU fishing; supporting NOAA and the Bureau of Ocean Energy Management (BOEM) with the progression of deep sea mining from an international diplomacy perspective; conversations with the White House Office of Science and Technology Policy (OSTP), NSF and others about maintaining U.S. scientific capacity; building ally capacity in the maritime domain; and data management capacity. Overall, the State Department is transitioning from a siloed to a more centralized approach, and OES is attempting to broaden its focus beyond the intergovernmental space and engage with the academic and technology sectors in the U.S. to better understand the state of domestic ocean science and technology.

M. Graham asked for clarity around topics and geographic areas that the administration is not prioritizing, including treaties and international organizations that the U.S. may withdraw from. R. Perry outlined some administration and State-aligned geopolitical areas of interest from an OES perspective, including preparing for rapid changes in the Arctic to provide more accessibility in the region and open up new possibilities for energy and resources; increasing communication capabilities with fiber optics, subsea cables, and cold AI; in the Antarctic region, co-use of science and military applications with space, tourism and managing human presence; and eliminating IUU fishing. M. Graham suggested that an additional topical area could be shifts in the way marine invasions are conducted, given changes in the movement of both vessels and information globally. R. Perry agreed. She added that the State Department has been involved in many multilateral organizations where the U.S. has contributed significant time and effort but has not seen a beneficial return on investment (ROI). Some of these organizations have subsidiary components that may be more beneficial to pursue separately.

K. Yarincik noted that the Pacific Islands Ocean Observing System (PacIOOS) had established infrastructure that could support the Department's goals around maritime domain awareness and building relationships with island nations. She also mentioned a past report from the Consortium for Ocean Leadership that focused on U.S. scientific capabilities in relation to international adversaries, which could be used to make the case for investing in ocean observation and technology. R. Perry said that one of her topics of conversation with NOAA leadership was around bringing PacIOOS and similar models to other countries to address coastal issues. She noted that the Consortium for Ocean Leadership report was something that had come up before and could now benefit from the level of administrative-wide connectivity and unity that this administration is focused on.

B. Kirkpatrick asked for R. Perry's thoughts on moving private partnerships forward based on her past industry experience. R. Perry noted that most private sector involvement has been focused on a service that agencies have needed, and they have not fully utilized its capabilities across the board due to risk aversion and overly precautionary principles. She pointed to DOD and the National Aeronautics and Space Administration (NASA) as examples of agencies

moving quickly toward integration of private sector expertise, which other departments could learn from.

Working Session
All Members

D. Hernandez reminded the committee of the timeline for work on recommendations: to have the preparatory working groups hold three or four meetings before the next public meeting, with possible informational briefings between February and April, and then begin drafting recommendations in late spring/early summer to be finalized by late June/early July. She suggested restricting the list of topics to two or three for discussion.

N. Rome noted that the AI and public-private partnership (PPP) working groups were organized before the transitions of the new administration. He suggested that those two topics could be consolidated into some of NOAA's priorities that the committee heard on Day 1, because it would be a missed opportunity not to align the committee's recommendations with the agency priorities. He mentioned modeling and requirements, connecting to international standards with WMO and the Intergovernmental Oceanographic Commission (IOC) and said that he would like to see this committee help with the connection between Global Ocean Monitoring and Observing (GOMO) and IOOS. D. Hernandez asked how he would like to see that relationship improve, and N. Rome said that while GOMO and IOOS often talk informally, there is no direct coordination between the two, and this could even take the form of a quarterly strategy meeting between the GOMO and IOOS communities.

J. Morell noted that IOOS has never been connected to the Global Ocean Observing System (GOOS) or to GOMO. K. Arzayus said that one area where they have been trying to move forward is aligning IOOS' and GOMO's data management, though they have not gotten much traction. GOMO recently developed a data management strategy and met with the IOOS Data Management and Cyberinfrastructure (DMAC) to leverage their expertise, but a concrete next step was unclear. N. Rome suggested that one way to frame a relationship between GOMO and IOOS is through the often-discussed need for a stronger connection between the coast and the open ocean, as both groups play a role in both domains. K. Yarincik agreed that there could be opportunities to talk about specific questions and gaps in data and clearly define the roles of each group and how they could collaborate, but they might not want to put too much focus on WMO and IOC.

S. Woll thought that public-private partnerships were an important topic and could be seen as an element of ROI, or vice versa. C. Edwards agreed and added that it would be helpful to establish the value of current models beyond a dollar amount and think about how PPPs could be leveraged, particularly in light of language they heard from NOAA on Day 1 of the meeting. S. Woll said that all of this could be summarized under increasing efficiency and effectiveness. D. Hernandez added that NOAA Administrator Jacobs' focus on requirements and ROI was evident in his remarks the previous day.

S. Woll clarified that these were recommendations for the Administrator about actions he should take; some of the discussion topics were more internal to IOOS. K. Arzayus said that the recommendations are going to the Administrator and will likely then be delegated down to the IOOS Office to implement. B. Kirkpatrick pointed out that the Administrator specifically mentioned IOC and WMO and those could be low-hanging fruit.

N. Rome said that given the recommendations were really for the IOOS Office, they should be sanity-checking to ensure that whatever they ultimately recommend is feasible for the office and also appealing to their 11 regional associations. B. Kirkpatrick recalled the prior day's discussion about centralizing data management as a prime example of something that would be unpopular with the RAs. D. Hernandez commented that there was no money to be saved by centralizing, and four of the RAs are already using the same data management contractor. K. Yarincik agreed that a better focus might be to ensure that their existing data management systems and structures will set them up for future innovations. S. Woll noted that if they want external entities to engage, one touchpoint (i.e. location to access data) makes life much easier.

The committee discussed commercial data buys versus free and available data as it relates to external participation in PPPs. D. Hernandez offered an example of how her RA is already working with the private sector but noted that some of that depends on the structure of the RA itself; some are nonprofits and others are housed in university systems. L. Lilly suggested that it could be helpful to assess each RA to see what is already working but was concerned about burdening them with extra work. K. Arzayus asked if she meant that the committee would direct IOOS or NOAA to conduct that analysis or that the committee would do it themselves, and L. Lilly said she was envisioning the former. K. Arzayus agreed that was the better approach; they would just need to clarify what it would look like.

E. Howlett said that he could understand the ownership issue for RAs around the DMAC, but it would be worth looking across the RAs to find areas of national coordination and data that is currently siloed, and the data management strategy should be aligned with where NOAA is going. C. Edwards added that this could be an opportunity for IOOS to position itself as the stewards for trustworthy data. D. Hernandez asked who would be better served by a change to the data management systems and what problem they were solving. The answer may be variable depending on the volume and the type of data, and the costs and burden that come with making large changes to data management systems are not trivial. B. Kirkpatrick noted that many researchers are putting a DOI on their data as an intermediate step between the PI and a national portal. C. Edwards reframed it as preventing a problem rather than solving one; for example, connecting datasets from multiple NOAA groups working on projects in the same area to prevent duplication of effort.

D. Hernandez reiterated that she's heard from their stakeholders that they don't like using the national data portals – they want the more individualized portals for their needs. E. Howlett said that the plumbing of the data management system should be separate from the user interface (UI). S. Woll added that there will be two kinds of users: those that want a UI, which the RAs should develop, as they have a good idea of what their customers like; and those that want an application programming interface (API) so they can have one repository. E. Howlett recalled

the Administrator's comments that they need to stop moving data around and instead bring the analysis and AI to the data, which IOOS is not particularly well set up to do. D. Hernandez suggested this as a potential recommendation, regarding RA data being AI-ready.

K. Arzayus recommended taking a step back and focusing on topic areas to flesh out for the next meeting. D. Hernandez summarized the areas discussed so far: interagency, data management, cost and return on investment, and modeling. On the last point, B. Kirkpatrick said that she would like to go back to IOOS' roots of observations, and K. Arzayus said that it would be helpful to tease out IOOS' role in modeling; is it only the observations, or is there a computing piece? S. Woll said that this is a specific example where clear guidance and expectations should be issued from the top to increase efficiency and effectiveness. C. Edwards said the more philosophical question is whether the observations are only for the models.

G. Gawarkiewicz said that data on its own is important for interpretation, capturing signals, and hypothesis generation. While modeling is important, thinking about how observations can be used for forecasting without the modeling component might be a more nuanced approach, especially as it pertains to AI. M. Graham said that if there was data in the IOOS enterprise that was not being ingested by models but needed to be, the reanalysis field could be an intermediary between the data and the model. He wondered if they should focus more on the reanalysis than the modeling so that what comes out of the reanalysis is readily ingestible by the models.

D. Hernandez said it seemed like the committee was going to have some kind of recommendation related to modeling, as it is a priority of this administration. B. Kirkpatrick said she would like to back up and do the data management before going to modeling. N. Rome said that his suggestion was not for an overhaul or full scale review, but just to ensure and demonstrate the IOOS modeling community's consistency with NOAA's modeling strategy. S. Woll suggested that they could include a sentence acknowledging leadership's efforts around AI without making it the subject of a recommendation, and other members agreed. J. Morell suggested focusing on centralizing data to make it available for training AI models.

K. Arzayus summarized the three possible recommendation topics she had heard in the discussion thus far: observations and modeling, which could be grouped together; public-private partnerships, which could expand to include ROI; and the interagency pieces, where she asked for further clarification on where the committee wanted to go. S. Woll suggested making interagency another bullet under public-private partnerships, which other members supported. After further discussion, the group agreed that the AI working group would be disbanded and AI topics would be rolled into the observations and modeling recommendation. Interagency partnerships would be incorporated into the PPP group, but a separate interagency recommendation could be released fairly quickly, and N. Rome volunteered to draft it. It was agreed that C. Edwards and E. Howlett would lead the observations and modeling working group.

K. Arzayus asked if there were specific additional information needs or briefings the committee wanted. N. Rome asked if they could invite the IOOS leadership team to the next virtual admin committee meeting to solicit constructive feedback on their proposed working groups and

recommendations. D. Hernandez suggested an informational briefing on what the IOOS Office is already doing to aggregate data from the RAs. G. Gawarkiewicz said that he would like to hear a summary of modeling efforts and motivations in the different RAs, and E. Anderson added that it should include past modeling efforts that may have concluded. D. Hernandez said that she would like a presentation on observations' role in particular models. K. Arzayus asked if it would be helpful to have a briefing from the Technology, Planning and Integration for Observation (TPIO) office on requirements for observations and modeling. Members agreed that it would, and D. Hernandez added that it should include information on which requirements have been tagged as IOOS requirements. B. Kirkpatrick asked for more information about the NOAA Observing Systems Council, and K. Arzayus recommended waiting a couple of months as there is a lot of change happening to revamp that effort.

Public Comment Period
There were no public comments.

Adjourn
The public meeting was adjourned at 11:59 a.m.

Minutes Certification

April 15, 2026

Debra Hernandez, Chair

Date