U.S. IOOS Advisory Committee Work Plan 2021-2024

Phase 1 Priorities	Phase 2 Priorities
Climate Change Adaptation	Marine Life Program
Diversity, Inclusion, and Service Equity	Enterprise Excellence
New Blue Economy	NOPP

Overview:

During the U.S. IOOS Advisory Committee (AC) public deliberations on November 29 and December 6, 2021, committee members decided to take a two-phased approach for delivering recommendations to NOAA and the IOOC during the current term. Phase 1 priorities include three topics on which the NOAA Administrator, Dr. Rick Spinrad, requested committee advice. These were strategically determined to be more urgent for the committee to address first due to the timing of major funding bills and government-wide budget formulation activities, as well as because the NOAA Administrator requested committee attention on these priorities, specifically.

Some cross-cutting questions for the committee to consider on these topics include:

- (1) How will the IOOS Enterprise support the NOAA mission to advance these priorities, including areas where IOOS performs an essential function within partnerships that cannot be completed by the government alone?
- (2) What strategic advice can the committee offer to shape the vision and execution of these priorities within NOAA and the IOOC?

Phase 2 priorities include topics that are relevant and important to the committee, and that were requested by the IOOS Office Director, Carl Gouldman, but do not have the same urgency for recommendations that phase 1 priorities do. The committee will deliberate on these priorities after recommendations for phase 1 priorities have been completed and delivered. Phase 2 priorities are also more tactical in nature and the committee will be briefed on programmatics, as well as the organization and operation of various components of the IOOS Enterprise.

Approach:

The committee will split into small teams (one per priority) to prepare materials, including perspectives and initial recommendations, to be fully deliberated upon at public meetings of the committee. Only during public meetings can official decisions be made regarding work of the committee; because these small groups are preparing for those deliberations of the full committee, they are called "Preparatory Work Groups (PWGs)". Preparatory work is exempt from many of the FACA reporting requirements for deliberative and decisional public meetings.

Each Committee member, including ex officio members, is asked to voluntarily join at least one PWG. Committee members may join additional PWGs if they wish. The IOOS AC staff may move Committee members between PWGs in order to maintain a balance across all phase 1 and phase 2 priorities, and may have to reassign members as needed.

Phase 1 Timeline:

January 14, 2022 - Committee members have volunteered for phase 1 PWGs.

February 17, 2022 - PWG membership is finalized at the administrative call. Identify what briefings they would like to receive at the next public meeting to inform their work.

March 31, 2022 - PWGs have each met once to refine scope and develop draft objectives to share with the broader committee, and generate a proposed timeline for developing recommendations.

April, 2022 - PWGs will brief out scope, objectives, and timeline at the spring public meeting.

November/December, 2022 - Committee deliberates on draft recommendations at the fall public meeting

January, 2022 - Committee finalizes recommendations and the chair transmits to NOAA and the IOOC.

Phase 2 Timeline:

January, **2023** - PWG membership is finalized at the administrative call. Identify what briefings they would like to receive at the next public meeting to inform their work.

February - May, 2023 - PWGs have met at least once to refine scope and develop draft objectives to share with the broader committee and generate a proposed timeline for developing recommendations.

June, 2023 - PWGs will brief out the scope, objectives, and timeline at the spring public meeting

November, 2023 (tentative) - Committee finalizes initial Phase 2 recommendations and the chair transmits to NOAA and the IOOC.

Phase 1 Priorities/PWGs

Climate Change Adaptation

Ideas, themes, and subtopics identified by the Committee:

- Ocean Climate Nexus
- Climate Products and Services
- Expand near-term forecasting
- Modeling
- Coastal Climate Signal
- Role of IOOS RAs in Service Delivery
- How far along the value chain should the RAs go in terms of what they provide for Resilience?
- Resilience and partnerships with NERRS, SG, others (overlaps with "Enterprise Excellence" phase 2 priority)
- HABs (overlaps with "Marine Life" phase 2 priority)
- How is climate changing marine life? (overlaps with "Marine Life" phase 2 priority)
- Ocean acidification (overlaps with "Marine Life" phase 2 priority)

PWG Members: Oscar Schofield (chair), Julio Morell, Molly McCammon, Sara Graves, *Dan Rudnick, Dan Costa, Susan Yee (ex officio), Josie Quintrell (ex officio)*

Diversity, Inclusion, and Service Equity

Ideas, themes, and subtopics identified by the Committee:

- DEIA / Equity in workforce and impacts driving systemic change
- Expanding data acquisition with citizen science
- Ocean Societal Indicators
- Environmental Justice
- Infrastructure and services
- Partnerships

PWG Members: Jyotika Virmani (chair), Julio Morell, Jen Read, Jason Biggs, Bob Winokur

New Blue Economy

Ideas, themes, and subtopics identified by the Committee:

- Economic Development
- How are RA assets used?
- Supporting industry based observing assets that would be used, likely via "data buys" or data purchase agreements, to complement the existing IOOS network in support of the Administrations 30 x 30, Seabed 2030, Marine Life 2030, and NOMEC
- Implementation efforts

- 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
- Explore the politics and implementation around data buys

PWG Members: Eoin Howlett (chair), Dick West, *Ruth Perry, Catherine Edwards, Scott Rayder*, Carrie Schmaus (ex officio)

Phase 2 Priorities

Marine Life Program

Ideas, themes, and subtopics identified by the Committee:

- Marine life / ecosystems
- Biological observing and forecasting
 - Mapping ocean resources that express biodiversity and unique assets
- How to administer a holistic marine life program?
 - Does this include captive breeding and active restoration?
- Connect RA to IOOS Office "marine life"
- Better coordination across federal efforts for improved data management and accessibility, including standardized protocols for increased access to the public
 - Establishing a method to sustain and scale baseline marine observations across all RA
 - Using marine life observations as an opportunity for cohesion and similar approaches
 - IOOS should partner with NMFS to make their data more accessible
 - To begin addressing this topic, need Inventory of marine life observations within RAs
- Increased funding for biological observations
 - Strategies to elevate biological projects to Tier 1 with RAs
- HABs (overlaps with "Climate Change Adaptation" phase 1 priority)
- How is climate changing marine life? (overlaps with "Climate Change Adaptation" phase 1 priority)
- Improve/focus on importance of biological observation to the RA stakeholder or community
 - Citizen science and observing
- Ocean acidification (overlaps with "Climate Change Adaptation" phase 1 priority)

PWG Co-Chairs: Dan Costa and Oscar Schofield

PWG Members: Julio Morell, Molly McCammon, Jason Biggs, Jyotika Virmani, Kristen Yarincik, Susan Yee, Ruth Perry

Enterprise Excellence

Ideas, themes, and subtopics identified by the Committee:

- National / Regional IOOS Partnerships
 - The "sweet spot" for national oversight of the System by NOAA's IOOS Office
 - The Regional Associations meeting national-level mission requirements of NOAA and other IOOC agencies
- Federated vs. Integrated System
 - o Individual RAs (distributed) vs.centralized- example of data management
 - Multiple repeating regional products by RAs
- Defining the coastal component of the Unified Forecast System (UFS) for NOS/NOAA
- Consolidated Unfunded Requirements List (CURL)
- Coordination with various partners in and out of NOAA
- Resilience and partnerships with NERRS, SG, others (overlaps with "Climate Change Adaptation" phase 1 priority)
- FY25 External Program Review
 - PWG can provide recommendations for direction, scope
 - Would be good to focus on something that is typically hard to evaluate (ex. Stakeholder engagement and not DMAC)
 - o Could break up Strategic Plan goals to do mini-evaluations on
 - What are the metrics that RAs use to evaluate what goes into 5 year proposals and how do they measure success?
- IOOS RAs as test beds for technology researchers and developers e.g. low-cost water level sensors, waves, HAB monitoring, webcams
 - Connecting with operational partners like CO-OPS
 - Connecting across RAs
 - Coastal climate signal

PWG Co-Chair: Catherine Edwards, Molly McCammon

PWG Members: Jen Read, Eoin Howlett, Sara Graves, Scott Rayder, (add IOOC ex officio member)

IOOS Program Engagement with NOPP

Ideas, themes, and subtopics identified by the Committee:

- Using NOPP to fund the IOOS RAs as demonstration grounds
 - NOPP is expression of cooperation among agencies
- Consider within IOOC context for targeted interagency recommendations and coordination, including how to broaden core support to IOOS RAs
- Examine the potential to add more to IOOS Programs consistent with national priorities
- Marketing NOPP across communities (federal, private, and public)
- Keep this scope reasonable and relevant to the IOOS mission
- NOPP Act (for reference/context; include language about it going to NOAA)
- NOPP Annual Reports to Congress
- Utilizing NOPP as a pathway for innovation
- Private-Public partnerships via NOPP

- NOPP can more easily move money between agencies compared to NOAA
- Recommend one big thing that NOPP can accomplish with RAs with interagency approach (i.e. here is something that could really make a difference)
- Can't just be an IOOS-NOPP relationship
 - Who else to bring in? NDBC? NCCOS?
- Recommendation to IOOC that they reinvigorate NOPP, specifically NOPP role in technology development

PWG Chair: None

PWG Members: Dick West, Ruth Perry, Kristen Yarincik, Bob Winokur, Dan Rudnick, Carrie Schmaus (IOOC ex officio), Scott Rayder