

June 14th, 2022 (12-1pm ET) and June 22 (3-4pm ET)

Materials:

- [Options Paper](#)
- [2021 Recommendations Report](#)
- [NOAA Response to 2021 Recommendations Report](#)
- [IOOS RA Activities Spreadsheet](#)
- [IOOS RA Partnership Spreadsheet](#)
- [June 27th Agenda](#)
- [Link to Carl's presentation from May 11](#)

Definition: The New Blue Economy (NBE) comprises the manufacture of technologies enabling ocean observation and measurement, use of these technologies to capture ocean data, and the provision of ocean information services supporting societal or economic benefits. It has been described as “a knowledge-based economy, looking to the sea not just for extraction of material goods, but for data and information to address societal challenges and inspire their solutions.” It is an economy founded on emerging capabilities for acquiring data and developing information and knowledge that supports harnessing ocean resources for economic growth, while protecting ocean health and ensuring social equity.

1. Attendees: Nick Rome, Carl Gouldman, Eoin Howlett, Krisa Arzayus, Scott Rayder, Melissa Zweng, Becca Derex, Fawwaz Hafizh, Schuyler Nardelli, Catherine Edwards, Carrie Schmaus

2. Discussion with Carl on NOS NBE Priorities:

C. Gouldman provided a synopsis of the activities within NOS related to the New Blue Economy.

- Identifying and engaging with Ocean Enterprise players (at various tech levels, with intermediaries, and with products to deliver servicers)
- Examining core information services, equitable service delivery (with close attention to accessibility), and workforce development
- Seeking to work across all of NOAA with cross-bureau proposals for the New Blue Economy
- Engaging with the private sector on New Blue Economy technology incubation with the goal to design engagement more strategically and develop a repeatable, transparent process

C. Gouldman answered some questions from the PWG:

- S. Rayder asked how we set up meetings and workshops etc to keep us moving and grow markets and show opportunities.
 - C. Gouldman noted that initiatives such as the DOE prize competitions and NSF accelerator programs are a great start.

3. Review discussion summaries from May meeting:

The PWG reviewed the discussion summaries from the May Meeting and agreed to the points.

May Meeting Summary:

- A standard definition of New Blue Economy is needed.

- Data standardization (collection, formatting, and archive) is needed.
- IOOS is a great testbed for creating operational designs for optimizing autonomous and in situ platforms for integrated observations. IOOS is a great facilitator and collaborator.
- All recommendations from the New Blue Economy PWG/AC should be broader than Offshore Wind. But Offshore Wind would be a great pilot for IOOS to generate a best practices design for optimizing use of in situ platforms, filling other observational data needs (larger feedback loop), and data standardization. Workforce and investment opportunities should be considered in the pilot as well.
- To ensure recommendations are holistic, the PWG should:
 - review and connect the 2021 FAC Recommendations to NBE
 - identify/review opportunities in the small business and ocean startup community
 - review IOOS Partnership list from previous PWG
 - review of related IOOS initiatives (to be briefed in future)
 - have a 2030 discussion - support of the Administrations 30 x 30, Seabed 2030, Marine Life 2030, and NOMECE
 - consider cross theme recommendations

4. Address actions, information gathering, and consensus for recommendations

N. Rome led the PWG in a discussion on potential recommendations.

- E. Howlett asked C. Gouldman if wind energy is a distraction or a focus.
 - C. Gouldman noted that how NBE supports wind energy is a good example. Wind energy needs a lot of ocean information to inform it. The industry needs guidance and it's a role for IOOS to play. IOOS should become the data dictator for offshore wind.
 - C. Schmaus agreed and noted that there are two sides to what we mean by the blue economy—there are enabling parts and products. We're really careful that we do not define the blue economy. We wanted NOAA do it for us and then DOE can see how wind, renewable energy enables that economy.
 - C. Gouldman noted that there is not a standard definition of New Blue Economy, but the existing framing statement can be shared to help. NOS is working on developing a peer-reviewed definition of the NBE and for a website.
 - The PWG doesn't want to come up with their own definition, but leverage what NOAA develops.
- N. Rome asked C. Gouldman which recommendations from the FAC would most help NOAA's activities.
 - C. Gouldman highlighted the 2021 Recommendations Report, Report Response from NOAA, and the New Blue Economy Options paper. He noted that there specific recommendations and responses which could use further context and guidance for NOAA. (1.2.2, 2.1, 2.2, 2.3.2). He added that the options paper lists out areas which would have the most impact.

5. Next Steps

The PWG agreed to:

- Review the current definition being utilized for New Blue Economy

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- Select a secondary meeting time to further examine the IOOS response to the 2021 FAC recommendations report. Specifically, sections 1.3, 2.1, 2.2, and 2.3.2.
- S. Rayder and E. Howlett will handle the report-out at the public meeting on June 27.

6. **June 22nd Follow Up Meeting:**

During the follow up meeting, the PWG agreed to:

- Use the definition for NBE from the options paper until told otherwise; working to see if we can get NOAA Administrator sign-off on that definition
- Focus on safe and efficient marine transportation, climate resilience, and renewable energy as subtopics within the NBE.
- Continue to flesh these out over the summer, dividing and conquering. Assignments TBD.

April 26th, 2022 (11-11:30am ET)

1. **Attendees:** Carrie Schmaus, Nick Rome, Dick West, Scott Rayder, Catherine Edwards, Schuyler Nardelli, Krisa Arzayus
2. **General Scope ([Work Plan](#))**
 - K. Arzayus noted that there will be briefings at the public meeting on May 11th. N. Rome reviewed the public meeting agenda and highlighted the 45 min New Blue Economy deliberation session. K. Arzayus noted that Carl Gouldman’s team will be working on background options papers to share and add to the discussion. Today’s goal is to get everyone thinking about this topic, get to know each other, and have someone from the PWG to lead the deliberation at the public meeting.
 - D. West noted that the “New” Blue Economy definition is vague. He added that we need to know how NOAA is looking at it. He added that the National Committee is developing observations input to the UNDOS and asked if we should be providing input there. He also asked if the RA contributions and its relationship to NOAA is the area we need to focus on.
 - K. Arzayus noted that NOAA released a Blue Economy strategy document a few years ago and it is different from Dr. Spinrad’s “New.”
 - S. Nardelli shared the UN definition of the Blue Economy: “The Blue Economy couples the promotion of economic growth, social inclusion, and the improvement of lives and livelihoods, while ensuring environmental sustainability of the ocean and coastal areas.” The new blue

economy is the data and knowledge from the ocean and coast and how they integrate into the Blue Economy. The New Blue Economy (NBE) comprises the manufacture of technologies enabling ocean observation and measurement, use of these technologies to capture ocean data, and the provision of ocean information services supporting societal or economic benefits. It has been described as “a knowledge-based economy, looking to the sea not just for extraction of material goods, but for data and information to address societal challenges and inspire their solutions.” It is an economy founded on emerging capabilities for acquiring data and developing information and knowledge that supports harnessing ocean resources for economic growth, while protecting ocean health and ensuring social equity.

- N. Rome noted that the work plan has a good list. He added that E. Howlett suggested that IOOS’s biggest asset is its research to operations testbed ability and realizing different revenue streams. N. Rome noted that we have the opportunity to choose where we want to focus, but we should align the Dr. Spinrad’s definition and progress.
- K. Arzayus noted that Carl Gouldman’s paper will be available a week before the meeting.
 - D. West suggested we review that doc and ask the RA’s to find a point of convergence or opportunity and FAC recommends it.
 - K. Arzayus noted that the discussion lead will have to be flexible based on what we hear, see in the read aheads, and our PWG discussions.
 - S. Rayder noted that we need to get a crystal clear definition of the new blue economy and how to measure it.
 - S. Nardelli clarified that the options paper will include definitions.
- N. Rome suggested we have a few top two or three priorities/challenge questions to help us to the recommendations we want to provide. The following suggestions were provided:
 - Technology needs, RA funding revenues, Research to Operations
 - K. Arzayus added that mitigation in wind energy could be a great option as well. The committee can help understand how this relationship works best.
 - K. Arzyus noted that Carl Gouldman noted for us to think of data as a service rather than data buys.
 - C. Schmaus asked if obtaining a POC from the DOE Wind Energy office would be helpful to this PWG. The PWG members agreed (**ACTION**).
- E. Howlett, C. Edwards, and C. Schmaus were volunteered to report out and facilitate the deliberations. N. Rome offered to provide slides to guide discussions.

April 13th, 2022 (2-2:30pm ET)

3. Attendees: Catherine Edwards, Eoin Howlett, Carrie Schmaus, Nick Rome

4. General Scope (Work Plan)

The working group was asked to review the details within the work plan and asked if there were certain topics which would be most influenced by FAC recommendations.

- N. Rome provided a brief overview of the FAC, previous recommendation formats, previous [documentation of IOOS RA efforts](#), and current work plan. He pointed the group to the cross cutting questions in the work plan and host of subtopics listed under New Blue Economy.
 - E. Howlett asked about the deadline for the recommendations.
 - It was noted that the timeline is flexible and dependent on the pace of the FAC.

5. Recommendations and Timeline ([2021 Recommendations Report](#))

The working group was asked to review the 2021 FAC recommendations report and provide feedback on the format and timeline of the new recommendations.

- The working group was unsure about the format and timeline of the new recommendations.
- N. Rome suggested mapping out the 2021 recommendations topically to the New Blue Economy.
 - N. Rome highlighted the recommendation: “Continue to undertake economic valuation processes of observing systems to better quantify benefits and enhance messaging for sustained observations.” He also shared the new [Ocean Enterprise Study](#).
 - E. Howlett noted that investing in the 11 regions generates a lot of value.
 - C. Edwards added that it would be beneficial to match regional and national priorities, i.e. helping meet NOAA’s mission and maxing out contributions to regional efforts. She asked the group on how to best accomplish this and suggested developing a recommendation to do so.

6. Report out and discussion leads at Public Meeting ([Draft Meeting Agenda](#))

The working group was asked to volunteer one person to report out on today’s meeting and lead the deliberations during the public meeting.

- The PWG agreed that they needed more time. A doodle poll was shared to set up another meeting prior to the public meeting to further discuss the New Blue Economy scope.
- C. Edwards suggested obtaining notes or a recording of the New Blue Economy listening session on Dr. Spinrad’s priorities. (ACTION) She noted that the themes of training (workforce development) was a very interesting subject area.
- C. Edwards noted that developing recommendations on the New Blue Economy was difficult as it is so tied to the Phase 2 priorities in the work plan, i.e. Enterprise Excellence. She asked if IOOS is considered a federation and if we should be recommending based on regional or national needs.
 - E. Howlett agreed and noted that the regions have been doing the most possible with the funds they receive but have not made much progress on creating revenue outside federal contributions. He asked how we best facilitate this.
 - N. Rome added that the regions are looking at funding outside federal contributions through proposals (SECOORA and others). He also noted that most requests have fallen within the hurricane supplemental.
 - E. Howlett noted that a major challenge exists with moving research to operations. He added that IOOS is a great testbed environment and an excellent incubator for things before they transition into NOAA operations.
 - N. Rome noted that the RAs are leveraging a lot and seeking funding from state and local governments.

- E. Howlett agreed and noted that IOOS is a great investment because of that leveraging. He suggested developing a list of creative revenue streams that the RAs are and could be utilizing.
- N. Rome agreed and added that IOOS needs to continue its efforts in engagement and outreach to better target super users.
- C. Edwards added that the RAs are a great incubator for IOOS-specific things too. She added that sustained funding and retention in observing is difficult but vital for the system.