

Integrated Ocean Observing System Advisory Committee (IOOS AC) Meeting
April 29, 2015
Consortium for Ocean Leadership (COL)
Washington, D.C.
Minutes

Member Attendance: C Lautenbacher (Chair), T Gulbransen (Vice Chair), T Browne, C Beegle-Krause, A Jochens, V Klump, L Lillycrop (Ex Officio), T MacDonald, J Manley, B Melzian (Ex Officio, phone), C Ostrander, L Ragster; V Kromer (IOOS AC Staff), J Snowden (IOOS AC Designated Federal Official)

Members Absent: D Legler (Ex Officio), L Leonard, E Pidgeon, E Terrill

Speakers: Ada Benavides (US Army Corps of Engineers (USACE)), Manson Brown (National Oceanic and Atmospheric Administration (NOAA)), Russell Callender (NOAA), Josie Quintrell (IOOS Association), Jose Sanchez (USACE), Steve Stockton (USACE)

Public Attendance: Hannah Dean (COL), Carl Gouldman (U.S. IOOS), Peter Hill (Woods Hole Oceanographic Institution) George Jungbluth (U.S. IOOS), Gary Magnusen (NOAA), Charles McLeod (NOAA), Dan Muller (NOAA), Nick Rome (COL), Linda Taylor (NOAA), Kristin Tronvig (NOAA), Z Willis (U.S. IOOS)

9:00 AM: Meeting Called to Order by Chair

- Z Willis began the meeting by announcing that the designated federal official duties will move from her to J Snowden, effective immediately.
- C Lautenbacher welcomed the Committee. He introduced Manson Brown as first speaker, and asked for around-the-room introductions.

9:15 AM: Highlights from Manson Brown's Remarks and Discussion

- Extended greetings from Dr. Sullivan, who asked him to represent her.
- Summarized NOAA's priorities:
 - Provide intelligence to resilient communities,
 - Provide accurate weather forecasts through evolving the weather service, and
 - Invest in observational infrastructure using NOAA Observing System Integrated Analysis (NOSIA) 2 to inform decision making.
- Commended Committee on the Vision statement, noting that it is short and impactful.
- NOAA looks forward to the second set of recommendations on guiding principles, stressing that strategic insight very important to NOAA.
- Noted that without coastal intelligence, safety is compromised, and environment is harmed.
- T MacDonald asked how the AC may help NOAA develop a broader integrated observing effort.

- M Brown noted that environmental intelligence needs to be better defined. Agencies need a clear differentiation between resilience and climate change, which can be a hot button issue
- J Manley asked how public-private partnerships can engage with IOOS.
- M Brown responded that we should recognize no one entity has the ability to do all that we need to understand planet. Encourage agencies to be open to listening to business - minded opinions.
- C Beegle-Krause suggested that the NOAA Mussel Watch program be expanded into Arctic areas.
- R Callender commented that the NOAA Mussel Watch program is very valuable monitoring program, providing critical data with a very small budget.
- M Brown responded that he would look into the Mussel Watch program

9:30 AM: Highlights from Russell Callender Remarks and Discussion

- Resilience is about learning from the past and taking the steps for the future, bouncing forward, not bouncing back.
- The nation needs coastal intelligence for coastal resilience. Within NOAA, coastal intelligence is the coastal component of Dr. Sullivan's environmental intelligence priority.
- Recently met with Gen. Bostic (USACE), Steve Stockton (USACE), and Manson Brown (NOAA) to discuss resilience. Applaud the committee for increased engagement with the USACE.
- Presentation gave examples how IOOS is critical for Coastal Resilience (on slide).
- Felt the AC priority areas are "right on" and NOAA supports them, especially raising the visibility and support for IOOS.
- Suggested the AC consider engaging with the NOS Coastal Roundtable to amplify IOOS messages.
- Encouraged the AC to consider ways to demonstrate and communicate that observations are critical for resilience.
- T Gulbransen noted that we want to find better ways for private industry to invest without putting up "toll booths" for things that should be free.
- R Callender replied that better data availability and discovery is critical to enable industry to find ways to connect.
- T MacDonald noted that we face a challenge to communicate how risk management fits into resilience, and its importance to economic prosperity.
- A Jochens reinforced the message that IOOS, as a national endeavor, needs to have a broad vision to allow agencies to interact with one another.

9:45 AM: Highlights from Steve Stockton Remarks and Discussion

- S Stockton provided a broad overview of the USACE missions, focusing on civil works.
- USACE meets some of its mission through multi-agency strategies, noting no one agency can meet the nation's needs alone. Coordination is a big challenge.

- S Stockton described IOOS as an "umbrella" creating a foundation of observations enabling commerce.
- USACE is also concerned with reducing risk and increasing resilience, specifically through innovative financing; better leveraging federal funds and finding ways for investors to contribute.
- J Sanchez noted linkages that already exist between USACE and IOOS, and identified gaps to fill by increased partnering with IOOS:
 - Expanded data management and communications (DMAC) participation through USACE, and with other agencies
 - Increased near-shore environmental information to support USACE mission
 - Improved model integration among agencies
- AC and S Stockton discussed the need for adaptive infrastructure to increase flexibility in changing times, noted the North Atlantic Comprehensive Study as an example of this way of thinking.
- AC and USACE discussed the challenge of increasing partner (federal and non-federal) participation, noting that often there are not enough people with enough time to make connections and leverage existing capabilities.
- Group discussed ways to capture support IOOS provides to many response events such as Super Storm Sandy. Focusing on regional issues might increase IOOS relevance to the nation.
- C Lautenbacher raised the issue of increasing IOOS prestige within the federal government, specifically with respect to budget increases. A Benvides noted that the best way to do this is through compelling value-added stories which show clear impacts with a budget increase.

1:00 PM: Highlights from AC and Interagency Ocean Observation Committee (IOOC)

Discussions on Priority Areas for Future Focus

- E Lindstrom and B Houtman expressed concerns over a lack of clarity in the current focus area descriptions. C Lautenbacher explained the origin and status of the areas, noting that this is early in their formation, and that the overall goal is for the AC to work on more than one issue at a time.
- Significant discussion focused on how to define resilience, making it clear to partners and in line with NOAA's working definition. Resilience is a topic all agencies should support, even if agencies speak about resilience in different ways.
- T Gulbransen asked how we might measure progress in IOOS with respect to the level of data integration.
- B Houtman noted that more fully implementing the Integrated Coastal and Ocean Observing System (ICOOS) Act is a great challenge to work on as it defines IOOS as greater than a single agency.
- Ultimately, one of the largest IOOS challenges is finding a way for agencies to recognize their contribution to IOOS without feeling they put their budget at risk.

1:45 PM: Highlights of Discussion of Full Committee Focus Areas A and B

Focus Area A: Raise the Visibility and Support for IOOS as a National Level Program within NOAA and the IOOC

- A Jochens led discussion. General consensus is that IOOS is a national program, but we need to identify the conditions of what that means. A Jochens will continue to develop this topic which will be discussed at the next full committee meeting.

Focus Area B: Statement on IOOS Support of Resilient Solutions

- L Ragster led discussion. AC agreed this statement should be completed prior to next full committee meeting. T MacDonald noted that this should be specific to IOOS, and to be careful the statement isn't too generic.

2:30 PM: Highlights from Leveraging Public-Private Partnerships (PPP), E Lindstrom Presentation

- Discussion focused on leveraging PPP for US IOOS. E Lindstrom presented NASA examples, and referenced the PPP research overview provided to the AC by the IOOC.
- AC asked for next steps for the IOOC PPP document. E Lindstrom suggested the AC could suggest next steps on creating PPP for IOOS; what can federal agencies do? AC will provide comments back to IOOC for their July meeting. T Browne will draft response.
- C Ostrander noted that PPP investments in IOOS infrastructure would be helpful, and that the timescale is 5-10 years, versus USACE or other longer term infrastructure goals. It could be a hard sell to industry, as they may not see a long term return on investment. C Ostrander also noted that we may want to focus getting industry to build an enterprise around publicly available data, similar to weather model.
- Z Willis noted that OSTP has redefined "operational" to "sustain and observe," a signal that the government recognizes the value of sustained observations.
- C Lautenbacher suggested identifying "swim lanes" defining government's investment versus private sector investment. For example, government should invest in highest priority tools, leaving the rest for public sector.

3:30 PM: Discussion with IOOS Association, Josie Quintrell

- J Quintrell provided an update on topics from the IOOS Association's perspective on appropriations, ICOOS Act reauthorization, and ongoing activities such as participation on IOOC task teams.
- Discussion focused on continuing to build a consistent IOOS message, such as: recognizing that post-certification, each region will have its own strategic plan which should speak to a national plan; messaging US IOOS contribution to GOOS; describing IOOS as enabling relationships at local, state, regional, national, and global scales.

4:30 PM: Public Comment

- None

4:52 PM: Meeting adjourned

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April 30, 2015
Consortium for Ocean Leadership
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Minutes

Member Attendance: C Lautenbacher (Chair), T Gulbransen (Vice Chair), T Browne, C Beegle-Krause, A Jochens, V Klump, T MacDonald, J Manley (phone), B Melzian (Ex Officio, phone), C Ostrander, L Ragster; V Kromer (IOOS AC Staff), J Snowden (IOOS AC DFO)

Members Absent: D Legler (Ex Officio), L Leonard, L Lillycrop (Ex Officio), E Pidgeon, E Terrill

Speakers: Bill Hanson (Hydrographic Services Review Panel (HSRP)), Susan Shingledecker (HSRP)

Public Attendance: Hannah Dean (COL), George Jungbluth (U.S. IOOS), Gary Magnusen (NOAA), Josie Quintrell (IOOS Association), Nick Rome (COL), Z Willis (U.S. IOOS)

9:00 AM: Meeting called to order by Chair

9:15 AM: Featured Speaker, Bill Hanson, Vice Chair, HSRP and Susan Shingledecker, Member, HSRP

- B Hanson gave an overview of the HSRP's charge and functions.
- HSRP speakers also suggested ways for IOOS to gain support, such as focusing on the product, articulating the return on investment, and approaching governors to encourage states funding for infrastructure.
- Existing connections between IOOC, particularly the regions, and HSRP was noted. Increasing connections beyond what exists may be a challenge is HSRP doesn't see exactly where they fit into the many layers of IOOS.
- B Hanson noted that ideally, NOAA Federal Advisory Committees need one slide in each of Dr. Sullivan's presentations to grow support.
- Group also discussed the benefits and challenges with using crowd sourced data to fill gaps, such as in the Arctic.
- Members suggested that IOOS AC and HRSP consider a future joint meeting in order to engage regions or governors' associations.

10:30 AM: Statement on the Essential Need for IOOS to Support Development of Resilient Solutions

- A Jochens noted that we need to develop a statement that speaks both to NOAA as well as the IOOC, which could be a challenge.
- This statement could also go toward raising the visibility of IOOS.
- AC noted that part of writing this statement is using language that resonates with other agencies. For example, E Lindstrom made a remark that NASA isn't focused on

resilience. However his slides spoke to human health and safety, which are certainly related to resilience.

- J Snowden suggested that the NOAA representative to the IOOC could ask that resilience be a discussion topic on the next IOOC meeting agenda. C Lautenbacher noted that he is willing to speak to the IOOC on this topic in order to gain more traction.
- V Klump suggested that one way to gain IOOC support is to develop our document using examples from other agencies' missions for them to endorse. C Ostrander agreed, and stated that it could be more powerful if each IOOC agency endorses and then releases the statement on their own.
- AC did not agree on endorsement as the right strategy, but agreed to continue developing a statement while gathering more information through IOOC meetings and interactions.

12:50 PM: Discussion on Subcommittee Focus Areas C, D, E, and F

Focus Area D: Provide Recommendations on Quality Management Indicators for IOOS

- Discussion led by T Gulbransen.
- C Lautenbacher asked Z Willis what quality standards exist. Z Willis working on this topic is something the IOOS Program does daily, and not an area in which we need recommendations.
- T Gulbransen stated that he was thinking of how to measure quality of programs, not data. How do we make programs more relevant to customers? How did IOOS engage interagency to support Quality Assurance of Real Time Ocean Data (QARTOD)? Z Willis noted that if the AC could identify common practices for such engagement, it would be useful.
- AC agreed that while these ideas have utility, it's best to put this focus area on hold for the time being and focus on other topics.

Focus Area C: Facilitate ICOOS Act Reauthorization

- T MacDonald led discussion, suggesting the need for an immediate statement.
- Z Willis listed actions that could not have happened without the ICOOS Act, such as certification, and codification of 11 regional associations into a national Regional Association (RA) network joining partners from all sectors.
- T MacDonald agreed, and Z Willis suggested the AC could be the body to write this "checklist" of ICOOS Act accomplishments.
- C Lautenbacher asked J Quintrell what would be most helpful to the IOOS Association. J Quintrell replied that raising the importance of IOOS within NOAA and to the NOAA Administrator as she engages with the community.
- The Committee discussed the need for Congress to hear about IOOS from their constituents. AC members cannot lobby, but may inform and educate lawmakers as private citizens on IOOS.
- AC agreed T MacDonald will draft letter to send to the NOAA Administrator and IOOC after review by the committee and the IOOS Association.

Focus Area E: Provide Recommendations to meet Post Certification Challenges

- C Ostrander led discussion, starting off by saying we should think of this as post-certification opportunities.
- C Ostrander told the AC they could reference the PacIOOS certification page which provides certification document submission information. In short, certification forces a region to think about governance with respect to data, finances, liability, evaluation of staff and services, strategic planning, and business planning.
- AC agreed that supporting ICOOS Act reauthorization implicitly supports and endorses certification.
- Committee also noted that regional certification is another way to gain recognition of the value in the regions by IOOC agencies, better defining the regions as much more than arms of NOAA.
- AC agreed that they would write a letter of congratulations to PacIOOS as the first region to earn certification. Letter would also be sent to NOAA and IOOC to increase awareness and recognition, as well as the other RAs to encourage them to work through the certification process.

Focus Area F: Develop Ideas for Improving Integration of Industry into IOOS

- T Gulbransen led discussion with presentation on NGOs and industry engagement.
- Integration with industry means aligning messages to co-invest in unmet needs.
- AC might want to consider focusing on current successes, and building on a small, focused scale to reach out to other industries. AC may also consider talking with industry coaches to identify best practices.
- C Lautenbacher recommended AC look at NOAA's Fair Weather Policy, which structures the environmental information enterprise.
- Chair also suggested that we need to create markets, build markets, and not focus on just perpetuating agency activities. Consider what government does well versus what industry does well. These groups have very different efficiencies. Identifying these "swim lanes" would benefit the public.
- AC agreed they need more time to continue this discussion and identify next steps and products for this subcommittee.

2:30 PM: Public Comment

- None

2:35 PM: Next Steps

- AC asked for IOOS Program Office input on which agencies to invite to future meetings. AC agreed that providing agencies with targeted questions ahead of time would result in a more focused discussion.
- AC also asked for list of IOOC agency representatives. J Snowden will provide this information.

- L Ragster noted that it would be useful to invite Louis Uccellini (NWS) to the next meeting at UVI. This is a good opportunity for CariCOOS to interact with NOAA leadership.
- T Browne asked for an update on new member nomination process. J Snowden told the Committee that new members will be approved by the NOAA Administrator this summer.

3:22 PM: Meeting adjourned by Chair

#	Action	Responsible Party	Due Date
043015.1	Draft letter in support of ICOOS Act reauthorization.	T MacDonald	05/15/2015
043015.2	Draft statement on how IOOS supports resilient solutions.	Resilience Subcommittee <i>L Ragster, Chair</i>	06/05/2015
043015.3	Provide recommendations on next federal agencies to engage on AC.	DFO	06/15/2015
043015.4	Respond to IOOC Public-Private Partnership paper with comments, questions.	T Browne	07/01/2015
043015.5	Draft post-certification opportunities "Congratulations" letter to PacIOOS.	C Ostrander	07/01/2015
043015.6	Draft "Raising the Visibility of IOOS" outline, recruit more AC members to engage.	A Jochens	2 weeks prior to next meeting