



Northeast Regional Planning Body Spring 2017 Meeting

May 24, 2017

NOAA National Marine Fisheries Service
Greater Atlantic Regional Fisheries Office, Gloucester, MA

MEETING SUMMARY

Prepared by The Consensus Building Institute



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On May 24, 2017, the Northeast Regional Planning Body (RPB) hosted its Spring 2017 Meeting. Approximately 20 members of the RPB attended as meeting participants, along with roughly 50 members of the public, who attended as observers.¹ The objectives of this meeting were to:

- Hear from RPB members about how their organization is using the Northeast Ocean Plan and the Northeast Ocean Data Portal.
- Review progress implementing the Northeast Ocean Plan.
- Obtain public input and decide on next steps for implementing the Plan through the end of 2017.

The Consensus Building Institute (CBI) drafted this summary. Presentation slides and other materials from the meeting are available at the following URL:

<http://neoplaning.org/may-24-2017-northeast-rpb-meeting/>.

Welcome and Introductions

Mel Coté, the RPB federal co-lead, introduced himself and welcomed participants. He noted that this was the first official RPB meeting since the completion of the Northeast Ocean Plan, and acknowledged the important work of the prior co-leads—Betsy Nicholson, Grover Fugate, and Rick Getchel—who led the RPB through the process of developing the Plan. He also expressed gratitude towards RPB staff and consulting firms who have helped move the work forward, including Nick Napoli, Emily Shumchenia, John Weber, and the teams from the Consensus Building Institute, Duke University, and others.

He noted that the Plan recently received recognition at the national level through a letter to President Trump from CEOs in the recreation industry, expressing support for regional ocean planning in general, and for the northeast and mid-Atlantic plans in particular.

Betsy Nicholson, NOAA, offered words of remembrance for Margaret Davidson, a leader in the field of coastal management who recently passed away. She then reported on her recent receipt on behalf of the RPB of the Peter Benchley Ocean Award, which recognizes the RPB for its efforts in completing the first regional ocean plan in the U.S.

Dan Morris, Deputy Regional Administrator of the NOAA Fisheries Greater Atlantic Regional Office, offered additional words of welcome. He expressed appreciation for the RPB's work on the Plan and its commitment both to good and efficient governance and to representing the interests of all parties and stakeholders. He noted that while NOAA has stepped down from its role as federal co-lead, it remains committed to the regional ocean planning process.

¹ The list of registered participants can be found in Appendix A. It is likely that it does not capture all the meeting attendees.



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Bruce Carlisle, Director of the Massachusetts Office of Coastal Zone Management, welcomed participants on behalf of Governor Charlie Baker and the Secretary of Energy and Environmental Affairs and noted Massachusetts' ongoing commitment to the Plan.

Chuckie Green, Mashpee Wampanoag Tribal Council, offered a welcome on behalf of tribal members and a tribal blessing. He commented that the tribes feel honored to have been part of creating the Plan as equals.

RPB members and members of the audience then offered individual introductions, providing their names and organizational affiliations.

Next, Ted Diers, the Northeast Regional Planning Body (RPB) state co-lead, introduced himself, noted that he would be facilitating the meeting, and reviewed the meeting agenda. He presented a timeline of key activities since the Plan was finalized in 2016 and noted that the focus of this meeting was determining the course of action for the next seven months.

Overview of Implementation Activities

Nick Napoli, contract staff to the RPB, presented an overview of the implementation work plan. He focused on two priority topics, the Northeast Ocean Data Portal and Plan Monitoring and Evaluation, while also providing brief updates on other implementation activities.

Related to the Northeast Ocean Data Portal, Mr. Napoli said the RPB has been focusing on:

- Communicating the use and role of the portal, primarily through case studies;
- Updating ocean activity data; and
- Updating marine life, habitat, and important ecological areas (IEA) data products.

Related to Plan Monitoring and Evaluation, Mr. Napoli said the Plan established two tracks: (1) Plan Performance Monitoring, focused on measuring the RPB's progress implementing the Plan and achieving the Plan's goals and objectives, and (2) Ecosystem Health Monitoring and Evaluation, focused on measuring changes in the ecosystem, including human activities. He noted that the Plan identifies both the Ocean Health Index (OHI) and the Integrated Sentinel Monitoring Network (ISMN) as opportunities for evaluating ecosystem health.

Mr. Napoli also provided the following brief topical, work group, and subcommittee updates:

- *Federal-State Coordination* — NOAA is actively working with states and other federal agencies to operationalize the portal into the Coastal Zone Management Act (CZMA). Next steps include pursuing the ability for early notification to states about potential projects, and an upcoming check-in with the New England states.
- *Federal-Tribal Coordination* — The RPB provided periodic updates on ocean plan implementation through EPA's Regional Tribal Operations Committee and Federal-Tribal Communications Collaborative calls, and secured Udall Foundation funding support for tribal travel to RPB meetings and other related activities



- *Energy and Infrastructure* — There has been significant activity in setting up an Atlantic Offshore Renewable Energy Development and Fisheries Steering Committee. The Steering Committee will organize a workshop in winter 2017 to look at issues regarding fisheries and renewable energy activities. In addition, the Bureau of Ocean Energy Management (BOEM) recently held a meeting of the Rhode Island and Massachusetts Task Force to discuss two unsolicited lease requests for previously unleased areas in the Massachusetts Wind Energy Area (WEA) and other issues. BOEM has also been holding government-to-government consultation meetings with tribes in New York and Massachusetts, and recently released a report with NOAA, *Socio-Economic Impact of OCS Wind Energy Development on Fisheries in the U.S. Atlantic*, which will inform its decision-making related to future offshore wind energy development.
- *NROC Sand Management Subcommittee* — Jeff Reidenauer (BOEM) has taken over the federal co-lead duties for this work group. BOEM and the US Army Corps of Engineers (USACE) recently signed a Memorandum of Understanding that will enhance coordination on managing sand, gravel and shell resources from the Outer Continental Shelf, and the sand subcommittee met by phone in March to discuss working with the RPB to develop an offshore sand resources theme on the data portal.
- *Aquaculture* — NOAA leads this group. The work group hosted a panel at the recent Northeast Aquaculture Conference and Exposition to discuss Plan implementation. This discussion led to follow up meetings about the potential co-location of offshore aquaculture and other offshore activities (such as wind). Next steps will include the work group reviewing its membership and organizing its next meeting.
- *Restoration Subcommittee* — This subcommittee is currently updating its membership and looking for a non-federal co-lead. The current co-leads recommend leveraging the NROC Coastal Resiliency Work Group for membership and for work that is already ongoing to inform potential restoration priorities.
- *Ecosystem Based Management (EBM) Work Group* — The group currently serves as a roster of subject matter experts available to the RPB to inform draft data products on Important Ecological Areas (IEAs).

Mr. Napoli reviewed the 2017 timeline for implementation. The timeline includes implementation paths for portal components (case study development, ocean activities, marine life and habitat, and IEA data), performance monitoring, and other topics. Mr. Napoli commented that the timeline calls for significant ongoing data processing, which will create data products that need to be reviewed with relevant stakeholders.

Discussion

RPB members provided a number comments and questions in response to the presentation:

- One RPB member asked for elaboration on the purpose of potentially combining efforts of the Restoration Subcommittee and the NROC Coastal Resiliency Work Group. RPB members responded that the purpose of joining them is due to the overlap in membership and responsibilities and the potential to leverage the expertise of additional NROC state members. They noted that, moving forward, the RPB will be more



budget-constrained, so it will be important to coordinate its work with existing activities.

- An RPB member asked how to define “coastal resiliency” and how that might impact the Restoration Subcommittee’s priorities if it is combined with the Coastal Resiliency Work Group. An RPB member suggested that “restoration” is more comprehensive than “coastal resiliency,” and that resiliency means “the ability of our ecological systems and coastal economy to weather extreme changes.” Another member noted that habitat restoration is a big part of having a resilient system. Techniques include creating living shorelines and beach nourishment, which are also restoration opportunities.
- A member asked about whether the BOEM/NOAA report, *Socio-Economic Impact of OCS Wind Energy Development on Fisheries in the U.S. Atlantic*, had been reviewed to ensure it is consistent with ocean plan and its recommendations. In response, support staff noted that there is an action in the Energy and Infrastructure chapter of the Plan that relates to the issues raised in the report. In addition, RPB representatives from NOAA and the Massachusetts Division of Marine Fisheries promised to look into this issue and report back to the RPB. It was also noted that the issue of improving our understanding the potential economic impact of offshore wind on sectors and coastal communities has come up with the BOEM intergovernmental task force and in conversations in Massachusetts.

Use of the Northeast Ocean Plan and the Northeast Ocean Data Portal

Mr. Napoli offered data on use of the portal over time. There has been a general upward trend in usage of the portal, and it had over 8,000 unique visitors in April 2017. So far, three case studies have been developed on the use of the portal, and additional case studies are being created.

Various RPB members then provided updates on how they and their institutions are using the Plan and the portal.

U.S. Coast Guard (USCG)

Michele DesAutels said the Coast Guard has been working to update the data for the portal on a regular basis, and using the data portal as one of its first sources of information about what is happening in the ocean as it works on waterways management.

U.S. Army Corps (USACE)

Jennifer McCarthy said the portal helps the USACE use the most recent and best data, and collaborate more effectively with other agencies and stakeholders, as USACE regulates activities in the waters of the US and issues a variety of permits. Ms. McCarthy noted that the fishing and aquaculture datasets have been especially helpful.



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U.S. Environmental Protection Agency (EPA)

Mr. Coté said because the portal collects the best available data in one place, it makes EPA's efforts significantly more efficient in its permitting and National Environmental Policy Act (NEPA) review efforts. The Plan also helps institutionalize early and frequent coordination, another EPA priority. Ivy Mlsna, EPA, provided an example of an instance in which the portal helped EPA provide sound advice on where best to permit burial at sea.

Connecticut Department of Energy and Environmental Protection (Connecticut DEEP)

Brian Thompson said Long Island Sound's spatial management process ("the Blue Plan") is mandated by the Connecticut legislature and involves collaboration among Connecticut and New York state agencies. In looking for a framework for collaboration, Connecticut DEEP has used the RPB as a guide. The Blue Plan's vision statement and goals are based on those in the Northeast Ocean Plan and borrow from the Plan's format.

Massachusetts Division of Marine Fisheries (Massachusetts DMF)

David Pierce said the data on distribution of commercial fishing for different species have been especially helpful to Massachusetts DMF. For example, he recently used data from the portal to provide constructive comments to the Mid-Atlantic Fisheries Management Council on how to improve management of long fin squid. Kathryn Ford added that Massachusetts DMF is still teaching people about the portal and how to use it. Various offices have been using it primarily to understand the regional context for specific issues.

U.S. Department of the Navy (Navy)

Chris Tompsett provided an update on the Navy's activities to institutionalize the Plan. Mr. Tompsett gave two examples of the Navy's Plan-related work:

- The Navy can use the portal to help identify good places to conduct tests.
- The Navy is working to improve its stakeholder outreach when exercises are planned. The portal helps them identify who uses an area.

National Oceanic and Atmospheric Administration (NOAA)

Betsy Nicholson provided an update on NOAA's use of and activities to institutionalize the Plan. NOAA has found the portal to be an important resource when responding to inquiries related to wind energy development, aquaculture development, Section 7 consultation (protected resources), and the Effects Test under the Coastal Zone Management Act. Before departing, previous NOAA Administrator Kathy Sullivan signed an Administrative Order stating NOAA's commitment to its obligations in all the regional ocean plans to which it is a party. The Order instructed all NOAA line offices to incorporate the certified regional plans into internal documents and processes. In addition, NOAA is incorporating the language of the Plan into its internal implementation plan and is conducting training sessions for staff on the use of the Plan and the portal. Ms. Nicholson shared a number of specific examples of how various entities within NOAA, such as the Office of Habitat Protection and the Protective Resources Division, are using the Plan to educate developers and learn about links between habitat features and species behaviors.



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New England Fishery Management Council (Council)

Mark Alexander said the Council often receives data requests, and staff have been able to save time by pointing people to the portal. In addition, the portal has been very useful in development of Fishery Management Plans, for example as a resource in presentations on the Deep Sea Coral Amendment, and in helping stakeholders understand fishing activity in the vicinity of announced Wind Energy Areas.

BOEM

Darryl Francoise provided an update on BOEM's use of and activities to institutionalize the Plan. BOEM frequently refers stakeholders to the Plan to help them make decisions, has added information on its website supporting the portal and referring users to it, and has linked its environmental studies information to the portal. In addition, Bob LaBelle, who was BOEM's representative on RPB until he recently retired, has briefed BOEM managers and the entire staff at headquarters on the Plan. Both the Assistant Secretary and the Director have endorsed continued use of the Plan and its implementation.

Houlton Band of Maliseet Indians

Sharri Venno reported that her tribe has not yet used the Plan but has talked about using it, for example by connecting with federal agencies involved in a recent wind power permit application and by working through the data portal to identify if there are any issues to be concerned about.

Maine Coastal Program

Kathleen Leyden reported on Maine Coastal Program's use of the Plan. She focused in particular on the importance of advanced coordination, and highlighted a number of examples where coordination either took place or is needed:

- There was positive coordination around meetings conducted by the Department of Energy on Mohegan Island, regarding the University of Maine Ocean Wind Test Site.
- There has been good cooperation with NOAA through SeaSketch, making sure there is no fishing activity when mapping operations are underway.
- Efforts by the Corps and others to advance living shorelines through NROC have featured effective cooperation.
- There is a need for good coordination regarding the Isle of Shoals North Disposal Site.
- Advanced coordination with the USACE and the Navy will be important for the Kennebeck River dredge.

Ms. Leyden also highlighted the critical need for more data in Maine, citing the large size of the state, its limited resources, and the paucity of nearshore data.

Examples from the public

Members of the public were invited to share examples of how they are using the Plan. They offered the following comments:

- Chris Maguire from The Nature Conservancy (TNC) noted that TNC participated in



discussions to develop Deep Sea Coral Management Alternatives, hosted by the New England Fishery Management Council, where stakeholders used the portal in real time.

- Nick Battista from the Island Institute commented that he has used the portal to help fishermen tell their stories to try to avoid losing fishing areas to tankers transiting Gulf of Maine, and in working with schools to educate children about the ocean ecosystem.

As this session came to a close, an RPB member noted the importance of emphasizing that the existence of the portal and its wealth of data should not be seen by developers as a way to argue that they do not need to collect their own project-specific data. Some plans put forward by wind companies have suggested that surveys are not necessary because of the existence of the portal. RPB members should educate stakeholders that while the portal is an important resource, it only serves a first step and additional site characterization will still be needed.

Northeast Ocean Data Portal: Progress & Proposed Next Steps

Updating ocean activity data and outreach to related stakeholders and experts

Mr. Napoli presented an overview of RPB activities to update and maintain ocean activity data on the portal, outreach to stakeholders and experts, and potential next steps. He reviewed activities on nine ocean data themes: commercial fishing, aquaculture, marine transportation, national security, cultural resources, recreation, energy and infrastructure, offshore sand resources, and restoration.

Later in the meeting, Mr. Napoli reviewed potential next steps for these themes and participants then offered comments and suggestions. The overview of each theme, suggested next steps, and RPB member feedback are all reported below.

1. Commercial Fishing: Relevant data sets include Vessel Monitoring System (VMS), Vessel Trip Reports (VTR), and Fishery Management Areas. Processing these datasets and releasing draft products requires significant work and industry input. Currently, data requests are in progress. There will be new draft products by end of summer and stakeholder review in fall 2017. The portal will be updated by end of 2017.

Mr. Napoli suggested that relevant next steps for this theme could include:

- Processing VMS and VTR and developing draft products;
- Engaging relevant stakeholders through targeted meetings to review the data products;
- Coordinating outreach and data development with the Mid-Atlantic and the Marine Cadastre; and
- Identifying opportunities to fill gaps in fishing activity data, especially lobster data.

RPB members had a number of suggestions on these next steps. Someone noted the importance of focusing on and incorporating data on the lobster fishery. Someone asked whether lobster data would focus on fishery effort or abundance and distribution. In order to



be consistent with other commercial fishing data, it might be better to focus on fishery effort, but this is something the RPB can decide based on how it believes the data will be used.

There was an extended discussion on the inclusion and potential uses for VMS and VTR data. RPB members gave the following input:

- Coastal programs need to know where fishing activity is coming from, for example if fishing offshore New York is actually coming from Rhode Island ports, in order to make a nexus for federal consistency purposes.
- It is important to understand the socioeconomic impacts of offshore wind development on specific communities.
- VMS and VTR data can be difficult to match up because they collect different information about fishing activity.
- Due to new carriage requirements for AIS, it may be possible to cross-reference AIS data to help connect fishing activity to specific ports.

Support staff noted that VTR data was excluded from the portal based on input received from the fishing industry during the planning phase. While the Northeast RPB focused on VMS data, the Mid-Atlantic RPB has done more work on VTR data. There is also extensive metadata in the Plan noting all the limitations of the VMS data. There was also a discussion on the responsibilities of the NMFS Greater Atlantic Regional Fisheries Office (GARFO) to maintain existing maps and data, as noted in the Plan, and a suggestion that GARFO would need to be included in any discussions on including VTR data.

In the end, RPB members suggested that decisions on these issues should be based on how the data will ultimately be used. A subgroup of RPB members and stakeholders should work together to address these questions, looking at what the data might look like and where there are gaps. They should be cognizant of the fact that as the data becomes more granular they may bump up against privacy concerns. Someone suggested that it could be helpful to start with a pilot project focused on just one area to see what is possible when looking at both VMS and VTR data together. Grover Fugate offered to use Rhode Island and the Rhode Island Fishermen's Advisory Group as a potential pilot project.

2. Aquaculture: Datasets include permitted aquaculture areas and shellfish management areas. Most of the aquaculture data is provided by the states, and new data will be released shortly from a number of states. Draft products will be released by summer. Stakeholder and agency review will take place in summer or fall 2017, with the portal updated by the end of 2017.

For aquaculture, Mr. Napoli reported that next steps could involve:

- Finalizing the regional aquaculture layers and reviewing them with states, USACE, NOAA, and the Aquaculture Work Group; and
- Identifying ways to engage the industry and municipalities to review and use the data.

In the discussion on this data theme, it was noted that states are currently aggregating data for municipalities, and that this takes significant work.



3. Marine Transportation: Datasets include vessel traffic (AIS) and Navigation & Safety (Aids to Navigation, Pilot boarding, Anchorages, Safety and security zones). AIS is an especially popular dataset, and 2015 and 2016 AIS data products are under development. The incoming data might be more comprehensive, as data collection has changed. The RPB hopes to have products out for review this fall.

4. National Security: Datasets include military installations, testing and training ranges, and danger and restricted areas. The Navy has committed to update this data on a regular basis. Mr. Napoli noted that datasets for this theme are being updated as necessary as identified by the Department of Defense.

5. Cultural Resources: There are currently datasets on national register sites and wrecks, each of which is being updated. Data requests regarding the national register historic sites are being sent to the National Park Service and states this spring. The schedule for other activities has not yet been determined. Mr. Napoli suggested the next steps are to update the National Register historic site data and to determine the status of information related to potential submerged archeological resources.

6. Recreation: There are datasets on activities ranging from boating to whale watching and diving, as well as coastal recreation areas and individual coastal activities from surveys. Characterizing these activities takes substantial effort. The coastal recreation areas data layer will be updated by fall 2017, and there are several potential options to review and update the footprint of a range of different recreational activities.

For recreation, Mr. Napoli reported that next steps could involve engaging organizations that represent different activities, like the RPB did successfully in the planning phase, to identify options for updating and maintaining datasets over the long term. He also noted that there is ongoing work to develop new layers and update the data, but the RPB needs to provide additional guidance on what needs to be done next. RPB members offered the following comments and suggestions:

- Engage (or continue to engage) state-based associations, including those involved in the state comprehensive outdoor recreation plan.
- Provide spatial information on recreation activities, not just aggregate numbers, with the goal of identifying the footprint of different activities.
- Instead of tracking where people recreate, focus on identifying the features they are visiting.
- A collective calendar of recreation activities — like races or exercises in an area — could be a useful tool for preventing conflicts.

There was also a discussion on how to continue updating the data over time. A number of members suggested it could be helpful to form a work group to engage with stakeholders, review the data, identify which datasets need to be updated consistently, which might be repeated moving forward, and consider where and how to involve others in collecting the data



on an ongoing basis. Someone suggested that the RPB should work on obtaining grants for this.

7. Energy and Infrastructure: Datasets include planning area status (for operational, permitted, lease areas, wind energy areas, and demonstration sites), which are currently being updated, and characterization of existing infrastructure like cables, pipelines, energy facilities and transmission lines. Mr. Napoli noted that the next steps could be updating the status of each offshore project or planning area and continuing discussions about the appropriate time to post maps related to agency announcements.

Members of the RPB discussed when it might be appropriate and helpful for agencies to provide advance notice of energy and infrastructure projects, such as WEAs, and engage in conversations with tribes. The energy and infrastructure work group could discuss specific scenarios and how agencies would handle them. In the case of WEAs, someone said it would be helpful to know if and when potential developers have expressed interest in an area.

There was also a question focused specifically on BOEM, and when BOEM might be able to release maps on the status of lease areas, WEAs, and unsolicited lease requests. A member said notice to and coordination with fishermen could help get additional information to developers earlier in the process, including information on what kind of fishing activity takes place in the areas they are considering, and whether they include any highly valuable fishing areas. Another member suggested BOEM release this kind of data as early as possible.

Mr. Francoise from BOEM provided background on how BOEM decides when to make information public. With respect to identifying call areas, BOEM provides public notice through the federal register along with associated maps. If BOEM receives an unsolicited lease request, it first analyzes the request to determine if it is legitimate, and then posts it publicly on the BOEM website. In such instances, BOEM can make sure this information is added to the portal. He pledged that BOEM will seek to release information as soon as possible within its regulatory framework.

8. Offshore Sand Resources: There is initial data on potential sand resources from recent investigations, but there isn't yet a sand theme on the portal. The sand subcommittee will decide what should be included in the portal.

Mr. Napoli suggested the potential next steps for this theme involve updating the portal as directed by the NROC Sand Management Subcommittee.

Jeffrey Reidenauer (BOEM) provided a more detailed update on ongoing Sand Subcommittee calls and meetings. The group continues to have discussions about offshore sand management, and is working to develop a marine minerals information system and connect it to the portal. There is also data gathered through Hurricane Sandy-related state cooperative agreements and from an ongoing Atlantic sand assessment project that they hope to incorporate into the portal. The largest missing piece is state-level information.



9. Restoration: The portal contains a list of potential restoration sites, which needs to be revisited. The Subcommittee will be reviewing the map of potential projects.

Stakeholder Feedback

Mr. Napoli reviewed stakeholder feedback on these efforts from the early May 2017 Regional Ocean Planning Stakeholder Forum. With respect to fishing, stakeholders suggested that the RPB review efforts by the New England Fisheries Science Center to characterize fishing activity using VMS and VTR data, fill the gap in data on lobster fishing areas, and consider approaches to use VMS, AIS or other similar technologies to obtain information on fisheries with data gaps. For aquaculture, stakeholders suggested the RPB conduct outreach to states and municipalities on using the portal to ensure data are updated and to help inform aquaculture siting. For recreation, stakeholders encouraged the RPB to consider additional ways of using the recreational data and affiliated groups to engage stakeholders during plan implementation. For energy and infrastructure, stakeholders asked the RPB to consider the appropriate time to include areas related to agency announcements on the portal, such as new WEAs or areas where unsolicited bids have been submitted.

Additional Discussion

RPB members offered comments and questions on the data layers:

- A number of members inquired as to the availability of information collected by offshore wind developers, such as the location of shipwrecks, for inclusion on the portal, as well as at what stage in the permitting process potential wind energy projects might be made public and noted in the portal. Darryl Francoise from BOEM noted that information like shipwrecks would likely be made public, but most of the data collected by developers is proprietary.
- Someone asked which datasets the RPB is coordinating with the mid-Atlantic region. Mr. Napoli said that currently the RPB is primarily coordinating with the mid-Atlantic on commercial fishing, marine transportation, and marine life data. For other types of data, it is coordinating around the methods for data collection.

Mr. Diers asked RPB members to raise any final objections to the next steps as laid out by Mr. Napoli and discussed by the group. There were no objections, so these next steps were approved.

Updating marine life, habitat, and important ecological area (IEA) data products

Emily Shumchenia, contract staff to the Northeast RPB, presented progress updating the marine life data, habitat data, and data on areas of ecological importance, as well as potential next steps. She noted that a fish biomass dataset for Long Island Sound was recently completed with the assistance of the Connecticut Department of Energy and Environmental Protection and was added to the portal in April 2017. Updates to data on regional eelgrass coverage are underway and will likely be completed by the end of summer 2017. They are updating other



marine life datasets as well, and considering issues like the temporal range of data and whether to drop out older data that may no longer be appropriate.

The RPB has also been working with the Marine life Data and Analysis Team (MDAT) to organize existing data and develop new draft products that could apply to each of five components of the IEA framework. IEAs are habitat areas and species, guilds, or communities critical to ecosystem function, resilience and recovery. The five components are:

1. Areas of high productivity
2. Areas of high biodiversity
3. Areas of high species abundance including areas of spawning, breeding, feeding, and migratory routes
4. Areas of vulnerable marine resources
5. Areas of rare marine resources

These five components represent an extension of the existing Marine Life and Habitat data on the portal. Eventually, the team envisions a resource of 50-100 peer-reviewed and -vetted datasets that represent ecologically important patterns and help identify data gaps. Like the rest of the data on the portal, the datasets should be easily updated with new data and information.

Many of these datasets are already included on the portal, but each needs to be reviewed to determine which IEA component it most relates to. Some data products not yet on the portal still need to be reviewed to evaluate source data and methods. In addition, the RPB has developed categories of data within the five components, which need to be reviewed to ensure they are effectively organized and complete.

Many of the datasets currently under review are being hosted in the SeaSketch platform, where they can be vetted by scientists. In determining how best to present the data, the team is evaluating key questions such as the following:

- For areas of high productivity (Component 1), which metric best represents primary productivity, and what is the appropriate analysis method?
- For areas of high biodiversity (Component 2), what is different about what the Richness and Simpson indices tell us, and is functional diversity a useful concept?
- For Component 3, areas of high abundance, is it appropriate to characterize abundance at the taxa level, and what are the pros/cons of the different approaches to summarize abundance?
- For Component 4, areas of vulnerable marine resources, what other stressor-sensitivity groups should be developed, and what other species and habitats are inherently vulnerable because of their life history?
- For areas of rare marine resources (Component 5), what are our options to address the many data gaps for this component, and how can rarity be calculated mathematically?

These are challenging questions to address, and RPB members and staff have expressed a need for more time to address them. RPB contract staff intend to get feedback from the RPB,



scientists, and stakeholders on these issues before developing the next round of draft products and determining priority discussion and decision points for a fall workshop. An RPB member specifically requested that they bring in experts on Richness and Simpson indices.

During the recent Stakeholder Forum, stakeholders provided feedback on the RPB's IEA framework and ongoing IEA efforts. Stakeholders expressed an interest in hearing about how new data could inform and update the marine life and habitat data products, and learning more about the pros and cons of different data products and methods. They also expressed interest in understanding more about how IEA products might help identify data gaps, and expressed a desire to stay informed on the RPB's progress.

Discussion

An RPB member asked the following additional questions, with responses from RPB contract staff in italics:

- How is “vulnerability” defined? Is ocean temperature and ocean acidification considered part of “vulnerability”? *They are thinking of vulnerability both in terms stressor-based sensitivity and an inherent vulnerability concept. For stressor-based vulnerability, they are looking at data included in the Plan, such as marine mammals sensitivity to sound, and the risk of collision and displacement from offshore wind for avian species. For fishing vulnerability, they have looked at habitat vulnerability data developed by the NEFMC, and are considering applying estimates from the NOAA climate vulnerability study to their fish biomass data. They are interested in collecting more studies that assign a vulnerability score or rank, or that characterize vulnerability spatially.*
- In looking at vulnerability, has there been any review of state wildlife action plans and their components on marine stressors? *They have not worked with the stressors identified in those plans, but they have compiled a single list of states' endangered, rare, and threatened species as a data product relevant to Component 5.*

Someone asked about the sustainability of the portal, in particular what will happen to the portal after funding runs out by the end of 2017, and whether there are data sharing agreements in place that will involve others updating the data or efforts to make the data self-updating. Mr. Napoli suggested that the most basic strategy is to increase states' and agencies' responsibilities for updating various data streams. RPB staff can then work on creating small extra value products at the end of the data streams, via grant funding. The Marine Cadastre will be an important component of this approach. An RPB member added that states and agencies need to discuss sharing resources to assist agencies that may not have the capacity to update the data.

Potential Next Steps

Ms. Shumchenia noted the following potential next steps for the RPB on developing data for each of the IEA components:

- Provide access to draft IEA data products and methods (in progress);



- Continue obtaining feedback on draft products and methods;
- Incorporate feedback and develop revised draft products;
- Host a public workshop in the fall to obtain input on key methodological questions that are identified during the expert and stakeholder review period; and
- Considering recent RPB and public discussions, focus on developing a range of datasets and information to support a more complete characterization of each IEA Component.

She noted that these items could be completed this fall or winter. She also noted her preference for the phrase “Components of Ecological Importance” rather than IEAs.

RPB members discussed these suggested next steps and offered feedback. There was a suggestion that the RPB consider beginning to discuss what applications it sees for the information it collects on IEAs. Other members suggested a more fluid approach, in which the RPB develops synthetic products that allow them to look at problems in new ways, and then opens up a conversation with the broader world on how these products might be used. One comment brought up a specific example of how rarity data products might be used in connection with Section 7 consultations. Another suggested that the RPB’s obligation is not to determine how to use these products, but rather to go through a systematic process pointing to components of ecological importance, developing synthetic products, and then being transparent about the limitations of the data and cautioning users on what might be inappropriate uses of the products.

Mr. Diers checked with the group to confirm that everyone was on board with the proposed next steps, and there were no objections.

Plan Performance: Progress & proposed next steps to develop an approach for evaluating the RPB’s implementation of the Plan

Mr. Napoli presented a draft approach for monitoring plan performance and ecosystem health, and potential next steps. There are two main tracks of monitoring and evaluation activity discussed in the Ocean Plan. One track involves Plan performance monitoring, or measuring progress toward implementing and achieving the Plan’s goals and objectives. Another track involves ecosystem health monitoring and evaluation, or measuring changes in the ecosystem, including human activities, to identify issues that may require management attention. For this latter type of monitoring and evaluation, the Ocean Health Index and the Integrated Sentinel Monitoring Network both offer potential opportunities.

With respect to plan performance monitoring, the RPB has developed an initial approach for monitoring the plan’s performance, which includes the following principles:

- Relate Plan performance indicators to Plan outcomes, goals, objectives, and actions (or



implementation activities)

- Establish a baseline
- Balance specificity with availability of information
- Establish fewer but more effective indicators rather than many indicators (i.e. value simplicity)
- Obtain public input
- Ensure indicators inform whether Plan amendments or updates are necessary

The draft approach also groups Plan actions into four major categories:

- Maintain and update data
- Inform regulatory and management decisions
- Enhance agency coordination
- Advance regional science and research priorities

For each of these categories, the draft approach identifies relevant actions from the Plan, includes draft outcomes either directly quoted or derived from the Plan, and identifies relevant goals and objectives.

Mr. Napoli summarized feedback obtained from stakeholders at the recent stakeholder forum, which included the following suggestions:

- The RPB should ensure the plan performance monitoring approach tracks stakeholder engagement in both (1) the individual regulatory and management processes that are informed by the Plan and (2) the RPB's broader planning and implementation process.
- The RPB should consider using concrete deadlines for achieving plan outcomes. It should also consider the difference between outputs and outcomes associated with the Plan.
- Potential metrics or indicators could include stakeholder satisfaction with the Plan and Plan implementation, level of engagement of different stakeholder groups, such as commercial and recreational fishing, and permitting timelines and changes in regulatory behavior.

Discussion

RPB members offered comments and questions touching on a number of themes, summarized below.

Staffing: It would be helpful to involve a university in plan performance monitoring, and masters students researching their theses. It was also noted that RPB involvement in plan performance monitoring will be essential. RPB members have experienced with performance indicators and will have insights on what is possible and what is helpful. It will be important to find a way to attribute improvements in agency behaviors to the Plan without adding new burdens. Agencies already do a lot of tracking, so this effort should connect to data that is already being compiled.



Tribal consultations: A tribal representative expressed interest in developing measures that might track agency consultations, engagements with developers, and responses to requests for tribal perspectives on permit applications. Their current record keeping is very ad hoc. Any work group on plan performance monitoring should have tribal representation, and Ms. Venno volunteered to participate. Jennifer McCarthy, USACE, noted that the Army Corps tracks tribal consultations; a tribal representative suggested that it is also important to track the value of these consultations from the tribal perspective.

Funding research priorities: There is language in the Plan calling for collaboration with the White House Subcommittee on Ocean Science and Technology and the National Oceanographic Partnership Program. Partnership with those entities might create opportunities for federal funding to address data gaps and science needs. The RPB recently provided testimony to the White House Subcommittee on science gaps identified in the Plan. However, there is no formal process or working group at present working on identifying science and research priorities. Members suggested that such a work group would be helpful, but the RPB does not currently have sufficient resources to convene and manage it.

Members noted that additional federal funding would be extremely helpful, but that the President's budget suggests it might not be forthcoming. Others suggested the RPB should remain flexible and ready for opportunities as they arise. A BOEM representative highlighted BOEM's five-year environmental studies program for the outer continental shelf, which has an annual call for information and is intended to support BOEM's efforts. Another member suggested that the RPB might consider new partnerships to share the burden of its work through a distributed network. For example, in the Casco Bay Estuaries Partnership, members are asked to bring their own resources to table instead of relying solely on federal government funding. The RPB might try to develop a shared agenda with groups like SeaGrant or the Regional Association for Research on the Gulf of Maine to draw in resources for its research priorities.

Potential next steps

Mr. Napoli highlighted the following potential next steps for Plan performance monitoring:

- Evaluate public engagement within each of the main action categories
- Obtain additional input on how to measure public engagement in specific regulatory processes and in the broader planning process
- Organize the RPB around the major action categories with a lead or co-leads for each
- For each category
 - Identify individual actions from the Plan
 - Determine intended outcomes from the suite of actions
 - Develop indicators, including a qualitative or quantitative baseline for each, and develop processes for RPB organizations to report on progress
- Develop options for communicating progress and determining how results can inform Plan amendments and updates and/or revisions to Plan goals/objectives/actions



In response to this list of next steps, Ms. Nicholson reported that NOAA is interested in helping move forward the action categories related to informing regulatory and management decisions and enhancing agency coordination. NOAA would like to improve our understanding of how to hold agencies accountable, support agency best practices, and develop common expectations about what agencies should be doing. A USACE representative also volunteered to help. This resulted in USACE and NOAA agreeing to co-lead a work group to develop a performance framework for the best practices and actions from the Plan that relate to enhancing agency coordination and informing regulatory and management decisions.

Someone stated that there are groups already established to help with renewing and updating data, so a performance monitoring framework to track the maintenance of priority datasets will involve those existing parties.

Members stated that there needs to be additional efforts to determine the effectiveness of tribal involvement, federal implementation of the Plan, and public participation. A member suggested that the RPB needs to talk more about how to facilitate public participation.

Mr. Diers checked with the group to confirm that everyone was on board with the proposed next steps, and there were no objections.

Monitoring Ecosystem Change: Proposed next steps for developing an Ocean Health Index (OHI) for the Northeast

Ben Halpern, the Ocean Health Index (OHI) Team Lead, provided an overview of the work plan to develop a Northeast OHI and potential next steps. The Northeast OHI represents one approach for monitoring and evaluating ecosystem health as called for in the Plan. The OHI team has acquired its own resources and has its own staffing to complete a Northeast OHI, but wants to ensure the OHI is informed by the RPB and regional stakeholders to ensure it is useful for the region.

Mr. Halpern said his team is working on answering two questions through consultations with stakeholders and the RPB: What do we need to do to adapt the OHI to this region, to capture its uniqueness, and how will we track changes in ocean health moving forward over time? He then provided a brief overview of the OHI methodology. The methodology includes a simple but carefully considered definition for a healthy ocean: *A healthy ocean sustainably delivers a range of benefits to people now and in the future.* This definition guides what they measure.

In light of this definition, the OHI seeks to identify the benefits that people derive from a healthy ocean. They have identified ten categories of benefits or goals: food provision, artisanal fishing opportunities, natural products, carbon storage, coastal protection, tourism and recreation, livelihoods and economies, sense of place, clean waters, and biodiversity. To measure ocean health, they look at both the current status and future trends for each of these goals. They assign a score for each goal, and then combine these scores into a single number.



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People have different perspectives on the value of using a single score, but it does provide a useful communication tool.

As a result of its eight years of experience, the OHI team has become much more efficient in its work. It has a variety of resources to bring to bear in helping entities develop their own OHIs, including science, software development, training, and web design and development.

Mr. Halpern then reviewed how the OHI could be tailored to the Northeast region. Currently, his team is working to gather regional data and information. Then, by early fall, they will convene a workshop with the RPB and interested parties to consider reporting regions, goals and benefits to be included in the assessment. They will then continue with data collection, hold a workshop on draft methods and reference points, and then calculate the scores.

In identifying reporting regions, they try to balance biophysical boundaries with management boundaries, and consider the scale at which decisions are made. The philosophy is to capture information at as fine a resolution as make sense. They have identified a set of draft reporting regions for the Northeast and are seeking feedback on them.

They have also made an initial attempt to translate the Ocean Plan's priorities into OHI goals. Their list includes goals and measures for: biodiversity, sense of place and identity, coastal livelihoods and economies, seafood provision, tourism and recreation, natural products, coastal protection and carbon storage, artisanal resource access opportunities, and clean waters. They also identified two additional OHI measures: resilience, and pressures.

They received feedback from stakeholders during the recent stakeholder forum, including the following suggestions:

- Consider the pros and cons of using the 3-mile line for federal waters
- Include representatives of New York in discussions considering the potential southern and western boundaries
- Consider using the entire Northeast as a single region, since we have already established the general planning area
- Consider using different areas for different goals
- Ensure this is a region-wide effort with broad input
- Be clear about the specific questions and timeline for stakeholder input

Stakeholders also expressed concern about the commitment required to implement the OHI, and about whether goal scoring will be meaningful for decision-making and communication purposes or make us lose sight of actual tradeoffs, or risk maximizing one goal at the others' expense.

Discussion

RPB members asked the following questions in response to Mr. Halpern's presentation. Responses from Mr. Halpern are in italics:



- Do you try to anticipate climate change and how it may change the index? *We do not forecast climate change, but you may forecast it if you want to. This would involve deciding on a model for how the world will look in the future. The challenge is we know very little about how climate change will affect things like the coastal economy, and other ocean benefits that we measure.*
- How do you create the scores for each goal? Is there a team that develops a consensus? *It is a quantitative process informed by data and indicators. First you determine your objective or target, and then determine quantitatively how close you are to that objective.*
- What process do you use to decide how to weight the importance of the various goals towards the final score? *We default to equal weighting. If there is an interest in unequal weighting, we work with decision scientists, and engage with stakeholders across a wide spectrum through an iterative process to identify the weighting, and try to come to a consensus.*
- Have any of the assessments you have done been informed by indigenous input, and if so can you share the examples? *Yes, the British Columbia assessment has been very much informed by indigenous input. It is not yet complete, but we will be happy to share the process and lessons learned. Other projects with indigenous input include Palau, Indonesia, and the Hawaiian island of Kauai.*

RPB members offered the following additional comments on the OHI and its implementation:

- The level of RPB involvement with the OHI should be moderate to high. The RPB should not simply step back and let the consultants figure it out.
- It would be helpful to work within existing RPB frameworks rather than creating something new and different.
- The process should account for tribal perspectives and involve tribes in providing information on how the ecosystem has changed over a longer period of time.

Mr. Halpern expressed agreement with the idea of tapping into existing processes and frameworks, involving tribes, and capturing tribal information.

Potential Next Steps

Mr. Napoli highlighted the following potential next steps for the OHI:

- RPB to determine level of involvement in the implementation of the OHI for the northeast
- OHI team to host a workshop to obtain input on reporting regions and goal setting
- Determine OHI reporting regions
- Determine goals for the northeast OHI that consider Plan priorities
- Engage regional scientists and collect data to inform assessments for each goal

Mr. Napoli noted that the group had expressed interest in engaging with the OHI, but it would be helpful to understand more about what that means on the spectrum from informing to



directing aspects of the data and science.

In response to this list of next steps, RPB members offered comments on the optimal relationship between the RPB and the OHI. Comments emphasized the importance of involving the public, the scientific community, and tribes to avoid public skepticism and take advantage of tribes' traditional ecological knowledge. Other comments suggested the RPB take a middle ground approach in working on the OHI. Members offered the following suggestions:

- The RPB might play a role in helping ensure the right people attend the OHI workshop.
- The RPB should steer those working directly on the OHI to the right datasets, but should not be directly involved in issues like putting weights on different targets.
- The RPB should be open to engaging, and help facilitate stakeholder involvement, but it should be careful not to interfere with the structure the OHI team has developed.
- The RPB should continue to spotlight and support the Sentinel Monitoring Network, which is also an extremely important effort.
- The RPB should make sure it has an opportunity to co-develop the OHI goals, and it should be easy for RPB members to show up and participate in OHI workshops.

Other members commented on the usefulness of OHI as a tool, but expressed caution on how its outputs get reported. One member suggested that the OHI will be a useful tool for outreach and education, and fills an important gap in the Plan regarding the state of the New England coast. But the member also recommended using arrows up or down to indicate progress rather than assigning a single number for the goals and to the ocean health overall.

Mr. Grover Fugate from the Rhode Island Coastal Resources Management Council noted that his agency has developed tools and predictive models to show what the shoreline will look like in the future. He suggested that there will be significant changes in the future, and the OHI should try to forecast what will happen and consider what we will need to do to get where we want to go in light of these coming changes.

Another member commented that it will be important to emphasize that the OHI is not a verdict on the success of the Plan. Elements of the Plan and the state and federal agencies involved may have no immediate influence on many of the OHI goals.

Members saw a role for the RPB in helping shape the reporting regions and the goals, and in engaging in ongoing communication with the OHI team to articulate the relationship between the Plan and the OHI. Members also saw a role for the RPB in helping with stakeholder engagement – both regionally and in each state. In light of these comments, Mr. Diers suggested that the co-leads would lead a work group to further clarify the RPB's role in guiding the development of a Northeast OHI in advance of a fall workshop.



RPB Discussion and Decisions About the Work Plan Through 2017

Mr. Napoli offered a summary of the RPB discussion and decisions on the work plan through 2017. He noted the following:

- For ocean activity data, work groups related to fishing, marine transportation, recreation, and other existing groups will inform updates to ocean activity data products and how the RPB engages related stakeholders.
- For data products related to marine life, habitat, and the components of ecological importance, the RPB will provide public access to draft data products and the methodological questions the RPB is trying to answer. The RPB will summarize any feedback collected by the end of August, revise the draft data products, and hold a workshop in the fall to review revised draft products.
- For plan performance, the RPB will track the maintenance of priority datasets through existing groups that are already updating those data products. Additionally, USACE and NOAA will co-lead a work group to track the implementation of best practices related to informing regulatory and management decisions and enhancing agency coordination.
- For OHI, the co-leads will convene a discussion to include the existing work group and others who are interested to inform next steps. Chuckie Green will participate as a tribal representative. The discussion will focus on fleshing out the RPB's relationship to OHI and related messaging, and on informing the development of a fall workshop, which will include decisions about OHI reporting regions and OHI goal setting.
- The RPB will hold its next meeting in late fall, likely in November.

An RPB member suggested that it would be important to engage the public again before the November RPB meeting, and suggested hosting a webinar. Other members agreed that a webinar would be helpful.

Mr. Diers concluded the meeting by thanking RPB members and the public for traveling to the event and participating so actively, and NOAA for providing the venue.

Public Comment

There were two public comment sessions during the meeting, one immediately after lunch addressing the morning session, and one later in the afternoon addressing the evening session. The following comments were offered during the first session. Comments from the second session are addressed further below:

Brent Greenfield, National Ocean Policy Coalition

The Northeast Ocean Plan includes a commitment to develop and review a “detailed implementation plan” in 2016 or early 2017 to prepare for plan implementation. The overview



and potential next steps that have been presented are helpful, but they are lacking important details on funding sources and timing for other proposed actions not related to the portal.

The National Ocean Policy Coalition urges the RPB to compile the detailed implementation plan called for in the Ocean Plan and make it available for public review and comment before making decisions on 2017 implementation actions. With respect to efforts to incorporate the Plan into Coastal Zone Management Act activity, any proposed CZMA actions should be acted upon only after they have been vetted through public comment review and public engagement.

Given agency commitments to fully explain the portal in agency decision-making, and to make publicly available implementing instructions, the Coalition urges all RPB agencies to formally publish their implementing instructions through notice and comment procedures, and explain how they are using the Plan in decision-making, before final decisions are made. All such guidance should be compiled and made available on RPB website.

It is critical that the regulated ocean user group community fully understand how agencies may use these products in decision-making, and that this information is made available simultaneous with draft review, not after products have been reviewed and finalized. In addition, legal and economic analyses that examine the potential consequences and statutory bases for federal application and use of these products should be developed and put out for public review before these products are finalized.

Nick Battista, The Island Institute

The Island Institute conducted the first fisheries characterization for NROC and has done lobster characterization for Maine fisheries. While the Northeast Data Portal does a better job showing the spatial footprint of the fishery, MARCO's fisheries data does a good job tying fisheries back to communities. Their data allows you to understand what communities may be fishing in which locations.

There are a lot of ways you can analyze and interpret the data, depending on the questions your trying to answer. However, neither the MARCO nor the Northeast datasets says anything about what fishermen are doing in a particular place, why they are there, why an area might be important, and what would happen if they couldn't be there. The datasets don't point out if an area is important for a particular community during a particular time of year, for example if not having access in April means a community will not be able to make money that month. We would like that kind of information to be considered in this process.

For lobster characterization, we've started articulating a framework for having a conversation with the lobster fishery on trends and changes across the fishery and fishermen's concerns about competing ocean space, instead of focusing on who is fishing where. The lobster industry is large and complex. It's the single most valuable species landed in the U.S., and almost all of it comes from New England waters. In Maine alone there are 260,000 commercial fishing trips for lobster, which is more trips than all the fisheries for any other state on the East Coast. One



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community in Maine has 200 miles of shoreline, which is equivalent to half the shoreline of Rhode Island. Three communities in Maine land \$114 million worth of lobster a year, which is the same size as all the commercial fisheries in New Hampshire, Rhode Island, and Connecticut.

As a fixed gear fishery, lobster is a difficult fishery to map. It is hard to ask everyone in the industry to put trackers on their boats without being able to tell them what you're going to do with the data. In addition, it would be helpful to have null dataset in data portal. There's nothing in the portal that says lobster *isn't* here. That information is in the metadata and the caveats but you need to go and read those to access it.

Overall, fisheries are happy to see the maps in the Data Portal, but they want those maps to represent the beginning of the conversation not the end. They want agencies and the RPB to talk to them about the physical and environmental factors that lead them to fish in a particular location.

Bill Kiley, Boston Water and Sewer Commission

I conduct research into avenues for uses and opportunities for the Boston Harbor area. In my research, I am puzzled by the lack of aquaculture in the country as a whole. Aquaculture can be unobtrusive, does not affect navigation, and is benevolent. It cleans the water, provides food, provides jobs, and helps the economy. China has 60 percent of aquaculture and its biggest market is the U.S. These are serious economic issues. Developing aquaculture could be a win-win. It can create habitat that we've lost. I urge the federal agencies to work to help create this huge industry that has so many upsides. It is time and capital intensive to get started with aquaculture, and there are opportunities for EPA, NOAA, and the fisheries service to help a benevolent field. It can create sea rise barriers, endless food, and wealth for the country. I want to see federal and Massachusetts agencies work to develop this crucial industry.

The following comments were offered during the second public comment session, addressing the afternoon session:

Heather Leslie, University of Maine Darling Marine Center

I have a number of comments. First, congratulations to you all. I can't tell you how proud I am to be part of the region that got this across the finish line first. I have been talking about the RPB to scientists around the world the past few months, wherever people have questions about how to make ecosystem based management (EBM) real. There is a lot of excitement and interest in what you are doing.

Second, I want to address the thread of sustainability—how we sustain this work moving forward. In the context of the Data Portal and OHI, we need to transition from the great heavy lifting of the past few years to a more sustained lift to make good on the aspirations of the Plan for the next couple of decades. The question is how we take that framework and start to cultivate more capacity. I have heard you talking about cultivating staff and agency capacity. I'm



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here to say there are hundreds or thousands of scientists who will drive to meetings like this if you can communicate what you need from them. If you use me as a conduit to convey your needs, I can talk to students about possible projects. By reaching out to the science community, we can connect with scientists who can gather recreational data. Most of my colleagues won't show up at meetings like this unless there is a clear request. If we can work together to craft those requests, I think you'll be surprised at the level of engagement.

Third and finally, I want to echo what's been said about the value of scaling down to get some of this work done. In Maine, we're in a relatively data poor region, and downscaling will be critical. You should think of a smaller spatial scale than the whole region to show the value of the Data Portal and OHI. That will make it easier to get community and science engagement.

Rebecca Clark Uchenna, The Island Institute

I also want to congratulate the RPB for sticking with this. I've been working with two schools in Maine. One is a middle school in Northport. The other is in Long Island Maine, in Casco Bay. We have worked with children in grades three to five, introducing them to the concept of ocean planning and to the Ocean Data Portal.

The students have been working with the Data Portal for most of the school year. Their work has resulted in a lot of great maps. We started with deep conversations about how the ocean has changed, and what they predict will happen. In both schools we focused on aquaculture, and are engaged in sugar kelp aquaculture. We are currently going through the permitting process.

This work is providing them with a strong science background. The ocean planning world combines science, policy, and ocean stewardship all in one package.

Through this work, I've learned two key lessons. First, the students are able to work effectively through hard concepts. Second, they are listening to us. There is a lot of fear right now. The Data Portal is really encouraging, and gives students a sense of hope that we're taking care of our oceans

Brent Greenfield, National Ocean Policy Coalition

There was a discussion today on some of the limitations and caveats on data sets acknowledged in the Plan documents. I request that the Plan performance monitoring and evaluation document be rolled into the draft outcomes. For example, as part of the draft outcome, the sections on maintaining and updating the data, informing regulatory and management decisions, and enhanced agency coordination should all include a clear communication and recognition of data uncertainty, limitations and caveats, and the need for this to be a nonbinding source of information. Finally, our members have continued concerns about agencies using the OHI in a regulatory setting, given that we haven't yet seen it applied in that setting.



Valerie Nelson, Water Alliance

We are happy with the plans, and see lots of robust things in there. The Plan is not a template for aggressive resource extraction, which is great. There are things mentioned in the Plan that are of great concern to the public in Gloucester, including sand and gravel mining, aquaculture, and wind. It is hard to know who on the RPB is doing what, and to know when there is an opportunity for the public to get involved. There was robust public participation in the creation of the Plan, but now we have reverted back to impenetrable bureaucratic committees. We have grave concerns about how aquaculture, sand and gravel will affect fishing ports like Gloucester.

With respect to the OHI, the idea of ten different measures, and that the ocean isn't just about profit making, is a major step forward. These are elements of a very complex system. I hope it is possible to work with the public and other stakeholders on understanding what the ocean is as a system, so it is not just a dry numerical exercise.

It would be helpful to look at which of those ten goals are causal, and which are outcomes. In Gloucester we're looking at our story, and we might get an NEA grant to tell it. That story drives our commitment to sustainable fisheries and clean water. It is possible that others would see sense of place as an outcome, but we believe it is probably the most fundamental factor. We may be in our current political situation because of a lack of understanding of the meaning actual people assign to things. People voted out of frustration that there's no meaning driving the bureaucracy. We need more talk about what the system really is, its drivers, and how to use systems understanding to prioritize the upward arrows that later can have spinoff effects. The public, especially in Gloucester, would be very interested in this kind of systems approach.

Melissa Gates, Surfrider

Surfrider is an environmental nonprofit that works to protect ocean waves and beaches. Thank you for the work you have done to get us where we are.

I have some serious concerns about using the stakeholder working groups at the state level to dive into the OHI. In Maine, the RPB has been very welcoming to participation by recreational stakeholders, but I have not seen that as fully in other states. In Massachusetts, there are Ocean Advisory Council seats mandated by law, but recreation is not one of those seats. In addition, a lot of the focus in those meetings has been on state-based plans, not the regional process. For the OHI, it is very important to get wide stakeholder feedback, including from those of use who surf, who work on the water, who live in our coastal communities, and who go to the beach. I hope there will be a hybrid approach.

Surfrider also supports a hybrid approach for OHI and the Sentinel Monitoring Network. We would love to hear more about that in the future.



Appendices



Appendix A: Meeting Attendance

Regional Planning Body Members

Federal Agencies

Jose Atangan, U.S. Navy, Joint Chiefs of Staff
Melville Cote, U.S. Environmental Protection Agency, Region 1
Michele DesAutels, U.S. Coast Guard
Darryl Francois, Bureau of Ocean Energy Management
Simon Gore, U.S. Department of Energy
Jennifer McCarthy, U.S. Army Corps of Engineers, New England District
Betsy Nicholson, National Oceanic and Atmospheric Administration
Chris Tompsett, U.S. Navy, U.S. Department of Defense
R. Phou Vongkhamdy, US Department of Agriculture Natural Resource Conservation Service

New England Fishery Management Council

Mark Alexander, New England Fishery Management Council

States

Bruce Carlisle, Massachusetts Office of Coastal Zone Management
Ted Diers, New Hampshire Department of Environmental Services
David Pierce, Massachusetts Division of Marine Fisheries
Kathryn Ford, Massachusetts Division of Marine Fisheries
Grover Fugate, RI Coastal Resources Management Council
Kathleen Leyden, Maine Department of Agriculture, Conservation and Forestry, Maine Coastal Program
Meredith Mendelson, Maine Department of Marine Resources
Brian Thompson, Connecticut Department of Energy and Environmental Protection

Tribal

George (Chuckie) Green, Mashpee Wampanoag Tribal Council
Elizabeth James Perry, Wampanoag Tribe of Gay Head (Aquinnah)
Sharri Venno, Houlton Band of Maliseet Indians

Participants

Nick Battista, Island Institute
Chris Boelke, National Oceanic and Atmospheric Administration
Amy Bushman, Conservation Law Foundation
Don Chapman, US Institute for Environmental Conflict Resolution / Udall Center
Jim Chase, Seacoast Science Center
Rebecca Clark Uchenna, Island Institute
Lisa Croft, National Oceanic and Atmospheric Administration
Ian Dombroski, U.S. Environmental Protection Agency, Region 1



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Susan Farady, University of New England
Jennifer Felt, Conservation Law Foundation
Marianne Ferguson, National Oceanic and Atmospheric Administration Fisheries
Melissa Gates, Surfrider Foundation
Brent Greenfield, National Ocean Policy Coalition
Annie Hawkins, Fisheries Survival Fund
Heather Hopkins, U.S. Navy
Zach Jylkka, NMFS
Katie Kahl, The Nature Conservancy
Bill Kiley, Boston Water and Sewer Commission
Alix Laferriere, The Nature Conservancy
Elise Leduc, Woods Hole Group
Heather Leslie, University of Maine Darling Center
Wendy Lull, SSC
Regina Lyons, US Environmental Protection Agency Region 1
Daniel Martin, National Oceanic and Atmospheric Administration
Sally McGee, The Nature Conservancy
Anne Merwin, Ocean Conservancy
Ivy Milsna, U.S. Environmental Protection Agency, Region 1
Rob Moir, Ocean River Institute
Katie Morgan, Ocean Conservancy
Mary Anne Morrison, U.S. Navy
Lauren Nutter, US Institute for Environmental Conflict Resolution / Udall Center
Richard Nelson, fisherman
Larry Oliver, U.S. Army Corps of Engineers
Jeff Reidenauer, Bureau of Ocean Energy Management
Marta Ribera, The Nature Conservancy
Darcie Ritch, Integrated Statistics, National Oceanic and Atmospheric Administration affiliate
Matt Robertson, TetraTech
Kimberly Roth, NEIWPPC
Whit Saumweber, Stanford University
Rachel Strader, Gordon and Betty Moore Foundation
Roselle Henn Stern, U.S. Army Corps of Engineers North Atlantic Division
Dean Szumylo, Greater Atlantic Regional Fisheries Office, NOAA (name???)
Peter Taylor, Waterview Consulting
Amy Trice, Ocean Conservancy
Jenna Valente, American Littoral Society
Prassede Vella, Massachusetts Office of Coastal Zone Management
Joseph Vietri, U.S. Army Corps of Engineers North Atlantic Division
Lee Walker, Sealite USA
Lori Watson, Salem Sound Coastwatch
Chris Williams, New Hampshire Coastal Program
Sarah Wolfskehl, National Oceanic and Atmospheric Administration Office of Coast Survey
Integrated Ocean and Coastal Mapping



Support Staff

Tobias Berkman, the Consensus Building Institute

Jesse Cleary, Marine Geospatial Ecology Lab, Duke University

Ona Ferguson, the Consensus Building Institute

Martina McPherson, ERG

Nick Napoli, Northeast Regional Ocean Council

Emily Shumchenia, Northeast Regional Ocean Council



Appendix B: Meeting Agenda

Northeast Regional Planning Body

Spring 2017 Meeting

Wednesday, May 24, 2017, 9:00 to 5:00
NOAA National Marine Fisheries Service
Greater Atlantic Regional Fisheries Office
55 Great Republic Drive, Gloucester, MA

Meeting Objectives

- Hear from RPB members about how their organization is using the Northeast Ocean Plan and the Northeast Ocean Data Portal.
- Review progress implementing the Northeast Ocean Plan.
- Obtain public input and decide on next steps for implementing the Plan through the end of 2017.

Agenda

- 8:30am Registration**
Light breakfast and coffee will be available. Meeting participants will also be able sign up to purchase a bagged lunch that will be delivered to the meeting room at noon.
- 9:00 Welcome and introductions**
- 9:20 Opening remarks, including recent timeline, milestones, and an overview of implementation activities**
Mel Coté, (U.S. Environmental Protection Agency, Federal Co-lead) and Ted Diers (NH Department of Environmental Services, State Co-Lead)
- 9:45 Use of the Northeast Ocean Plan and the Northeast Ocean Data Portal**
Regional Planning Body (RPB) Members
- Updates from each RPB member about how their organization is using the Plan and the Portal followed by discussion about ways to track and communicate agency implementation. This will inform subsequent agenda topics related to the Portal and evaluating plan performance.
- 10:45 Break**
- 11:00 Northeast Ocean Data Portal: Progress and proposed next steps for updating ocean activity data and outreach to related stakeholders and experts**
Nick Napoli (contract staff to the Northeast RPB)



Summary presentation about progress updating ocean activity data on the Northeast Ocean Data Portal and potential next steps, including input received during the Stakeholder Forum. Brief discussion to follow the presentation.

11:30 Northeast Ocean Data Portal: Progress and proposed next steps for updating marine life, habitat, and important ecological area (IEA) data products

Emily Shumchenia (contract staff to the Northeast RPB)

Summary presentation about progress updating marine life and habitat data on the Northeast Ocean Data Portal and potential next steps, including input received during the Stakeholder Forum. The presentation will also include potential next steps for obtaining input on draft data products and methods for each component of the IEA framework. Brief discussion to follow the presentation.

12:00 Lunch

For those participants staying in the room, there will be an opportunity to review the Portal and draft data products discussed throughout the morning.

1:00 Public comment on morning agenda topics

1:45 Plan Performance: Progress and proposed next steps to develop an approach for evaluating the RPB's implementation of the Plan

Nick Napoli

Summary presentation providing an overview of the draft approach for evaluating plan performance and potential next steps, including input received during the Stakeholder Forum. Brief discussion to follow the presentation.

2:15 Monitoring Ecosystem Change: Proposed next steps for developing an Ocean Health Index (OHI) for the Northeast

Ben Halpern (OHI Team Lead)

Overview of the work plan to develop a Northeast OHI, including potential immediate next steps for obtaining detailed feedback from the RPB and stakeholders about near-term priorities. Brief discussion to follow the presentation.

3:00 Break

3:15 Public comment on afternoon agenda topics

3:45 RPB discussion and decisions about the work plan through 2017

5:00 Adjourn