

Northeast Regional Planning Body Spring 2017 Stakeholder Forum

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MEETING SUMMARY

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Introduction

On May 2, 2017, the Northeast Regional Planning Body (RPB) hosted a one-day Stakeholder Forum on the implementation of the 2016 Northeast Ocean Plan (Plan). Approximately 40 participants from federal and state agencies, industry groups, fisheries, academic institutions, nonprofit organizations, and elsewhere attended the forum.¹ The objectives of this meeting were to:

- Provide updates and discuss progress implementing the Plan, with a focus on RPB initiatives to:
 - Use, maintain, and update the Northeast Ocean Data Portal (Portal).
 - Advance aspects of plan performance monitoring and evaluation.
- Obtain feedback on progress to date and on potential next steps to inform decisions at the RPB meeting on May 24, 2017.

Staff from the Consensus Building Institute (CBI) facilitated the forum and drafted this summary. Presentation slides and other materials from the forum are available at the following URL: <http://neoplaning.org/wp-content/uploads/2017/05/NE-Ocean-Plan-Implementation-Update-5-2-17-Stakeholder-Forum-1.pdf>.

Objectives of the Day and Major Recent Milestones

Ted Diers, the Northeast Regional Planning Body (RPB) state co-lead, welcomed participants to New Hampshire and to the forum.

Mel Coté, the federal co-lead, echoed Mr. Diers' welcome and acknowledged the efforts of Nick Napoli, Emily Shumchenia, John Weber, the CBI team, Jesse Cleary, Corrie Curtice, and all who participated in moving work forward. Mr. Coté delivered a quick overview of the RPB's membership, reminded participants of the Plan's goals, and reviewed the Plan's timeline from October 2016 through May 2017 (the timeline can be reviewed in the slides via the URL above). Mr. Coté highlighted the recent transition to new co-leads and the upcoming RPB meeting in Gloucester, MA on May 24, 2017. Mr. Coté also reiterated the meeting objectives, noting that the intent of this forum was to inform the RPB as it considers next steps for implementation through 2017.

Northeast Ocean Plan Implementation Updates

Nick Napoli, contract staff to the RPB, updated participants on the implementation of the Plan. Mr. Napoli focused on two priority implementation 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 described how the RPB has been focusing on the following aspects of implementation:

¹ The full list of registered participants can be found in Appendix A.



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

In addition, Mr. Napoli noted that public outreach and engagement is essential to advancing each of these Portal priorities.

Related to Plan Monitoring and Evaluation, Mr. Napoli described how the Plan established two tracks: (1) Plan Performance Monitoring, which focuses on measuring the RPB's progress implementing the Plan and achieving the Plan's goals and objectives, and (2) Ecosystem Health Monitoring and Evaluation, which focuses on measuring changes in the ecosystem and human activities.

Mr. Napoli also provided a brief update on the activities of other work groups and subcommittees for specific topic areas, including:

- *Ecosystem Based Management (EBM) Work Group*: The group has not met since July 2017. It currently serves as one roster of subject matter experts available to the RPB.
- *Aquaculture Work Group* - The National Oceanic and Atmospheric Administration (NOAA) leads this group. The Plan states that this group will focus on the following questions: How can the data in the Portal be maintained? How might the Portal be used to inform the siting of offshore aquaculture? What kind of agency coordination is needed related to advancements in the industry? 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).
- *Sand Management Subcommittee* - The Bureau of Ocean Energy Management (BOEM), the Army Corps of Engineers (USACE), and the Commonwealth of Massachusetts co-lead this subcommittee. It met in Fall 2016 and has held occasional calls since then. They are primarily looking to assess potential offshore sand resources.
- *Restoration Subcommittee* - This subcommittee has not yet met but plans to meet once during 2017 to review and update relevant data on the Portal.

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 concluded this section of the agenda with a few points.

- The RPB has funding to achieve its work plan through 2017. Today, the RPB hopes to receive input on next steps related to each of the activities through the end of the year.
- The RPB welcomes input and assistance as it develops Portal case studies.
- The RPB will be reaching out to the public through the summer and fall to obtain input on updating the ocean activity, marine life, and important ecological area data products.



The RPB would also like input on the approach for evaluating plan performance and on opportunities to monitor ecosystem health.

- The RPB expects to hold two meetings this year: May 24 and another in the fall or early winter.

Discussion

Participants made the following comments and asked the following questions. Responses from ocean planning staff are italicized:

- The Plan says that the RPB will develop a detailed implementation plan. Is this the detailed plan? *The Plan itself is in fact a detailed work plan and we are following it. Today's presentations and discussion will provide additional details about implementing the Plan and we are asking for feedback on those specific components that are moving forward through the end of the year.*

Agency updates on implementation of the plan

Various RPB members offered a summary of their agency's activities in helping implement the Plan.

EPA

Mr. Coté provided an update on EPA's activities to institutionalize the Plan. EPA has two main responsibilities related to the Plan: environmental review (under the National Environmental Policy Act (NEPA)) and permitting air emissions and wastewater discharges (under the Clean Air Act (CAA) and the Clean Water Act (CWA)). The Portal and the best practices laid out in the Plan enhance EPA's ability to fulfill these two responsibilities and encourage other stakeholders to engage with EPA's work. EPA is working internally to operationalize the Plan, primarily in the environmental review branch which reviews disposal site designation and other agencies' environmental impact statements.

U.S. Department of the Navy

Chris Tompsett provided an update on the Navy's activities to institutionalize the Plan. The Navy does not have regulatory responsibilities related to the Plan, but it does have responsibilities under NEPA. There is a Secretary of the Navy instruction currently under development that will instruct Navy staff to follow the Plan and utilize the Portal, but no publication date is available yet. The Portal is one of the data sources that the Navy's Marine Resources Support group uses. In addition, the Navy reviews data updates annually for the national security section of the Portal and remains committed to that effort. 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 else uses an area.

BOEM

Bob LaBelle provided an update on BOEM's activities to institutionalize the Plan. Like EPA, BOEM has a regulatory role. Mr. LaBelle shared three updates:

- BOEM's state task forces assist the agency in regulating the offshore wind industry. BOEM is currently looking at transitioning to a more regional approach and the Plan



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helps them move towards that goal. BOEM will publish a Request for Feedback this summer to gather input on what its next round of offshore leasing should entail and where it should be located. As part of this effort, BOEM's internal guidance now includes instructions to use the Portal to "inform and guide" its decision-making. Internally, BOEM is communicating to its staff that the Portal is a valuable tool that should be incorporated into their work.

- BOEM has responsibility for mineral resources, including sand, in federal waters. BOEM signed an agreement with the US Army Corps of Engineers (USACE) to collaborate more closely as they establish an offshore inventory of sand resources.
- BOEM continues to contribute to the joint NOAA-BOEM Marine Cadastre (<https://marinecadastre.gov/>) that helps support the Portal.

NOAA

Betsy Nicholson provided an update on NOAA's 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. Ms. Nicholson shared three updates.

- Before departing, 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.
- 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.
- NOAA will continue its annual commitment to update data on the Vessel Monitoring System (VMS) program. NOAA also continues to work with the U.S. Coast Guard on data updates for the Automatic Identification System (AIS).

US Army Corps of Engineers

Jennifer McCarthy and Roselle Henn provided an update on USACE's activities to institutionalize the Plan. USACE's key responsibilities under the Plan are permitting, navigation, coastal risk management, and sand resources. Within the division, they work with both the Northeast and Mid-Atlantic RPBs. While its staff are beginning to use the Portal, USACE has determined that they need to conduct additional training and outreach for its staff. USACE is pleased that some of the data layers available on the Portal are ones they have not been able to find on other sites.

U.S. Coast Guard

Onni Irish provided an update on the Coast Guard's activities to institutionalize the Plan. The Coast Guard (USCG) utilizes the Portal as one of many information sources to inform its navigational risk assessment and waterway management responsibilities. USCG Headquarters is currently working on data updates for AIS data. Ms. Irish noted that other regions still lacking a data portal can look at the Northeast's Portal and see its utility, hopefully encouraging them to build their own.



Northeast Ocean Data Portal: Maintenance and Use of the Portal

Ms. Nicholson and Mr. Napoli presented an overview of the approach to maintain the Portal and initiatives to communicate its value. Mr. Napoli reviewed how different chapters of the Plan dictate Portal update, maintenance, and public outreach activities. Chapter 2 of the Plan describes the process for developing and vetting priority data with stakeholder and expert input. Chapter 3 describes the priority datasets for each topic and the RPB actions to maintain and update those priority datasets. Chapter 4 summarizes agency responsibilities for maintaining data. He emphasized that a key piece of maintaining the Portal over the long-term is identifying and maintaining priority data sets. The RPB is using the agency responsibilities table in Chapter 4 of the Plan to identify priority data updates and related agency responsibilities.

There has been a significant increase (nearly threefold) in unique visitors to the Portal since the Plan was certified in December 2016. Some daily and weekly spikes in visitor numbers may be associated with agency announcements and other events.

NOAA is committed to building Portal updates into its budgets and its work in order to stay on schedule. A dynamic, easy-to-use, and well-advertised Portal is critical for changing behaviors, particularly amongst federal agency staff. NOAA, in collaboration with BOEM, is working on an infographic that will describe the uses of the different data products and information systems available to ocean planning stakeholders (e.g. the Portal, Marine Cadastre, etc.). The RPB is also working to develop a series of case studies that illustrate how different agencies and stakeholders use the Portal. The planning team wants to hear how people and agencies are using the Portal and develop case studies around these examples.

Discussion

Participants made the following comments and asked the following questions. Responses from ocean planning staff are italicized:

- What types of stakeholders are visiting the Portal? *We can see what web page visitors are coming from and we have a wide range of users from industry, environmental groups, and academia. I agree that it would be good to track visitors by sector. We also have a comments section on the Portal and we have had a mixed group of stakeholders use that feature to submit feedback. Some of this feedback has been used to develop case studies.*
- Has there been forward progress on collecting lobster fishery data? We (the lobster industry) have been clashing with agencies, especially related to the upcoming development of long-line aquaculture. We need more effort from the federal government to get this done and we need to determine the right reporting scale in MA. *This is an important data gap and we recognize that. George LaPointe and the Island Institute will talk about their work on this issue later in the forum.*
- Where can we find the case studies? *They are currently on our beta test site but we will start moving them over to the Portal soon.*
- Some fishermen are having trouble finding coordinates for shipping channel lanes, channel markers, buoys, etc. on the Portal. *Buoys are in the Portal. The user should zoom to the appropriate scale to see them. We probably need to provide more training and guidance for users on how to find this kind of data.*



Northeast Ocean Data Portal: Updating the Ocean Activity Data on the Portal

Mr. Napoli presented an overview of RPB activities to update and maintain eight ocean activity data themes, including related stakeholder outreach. Data requests for many of these themes are under development now and some data products will be released on a staggered schedule this summer and fall. Stakeholders can find out about new data products from the Portal's Twitter feed or from the newsfeed section on the Portal homepage. The RPB would like stakeholder assistance with outreach related to the development and review of updated data products. Mr. Napoli, with input from Daniel Martin (NOAA), reviewed recent activities for each theme; questions and comments from participants are included below:

Commercial Fishing

The VMS dataset is extremely popular on the Portal. The Portal currently has two time periods for this dataset that run through 2014. The Portal technical team just received data for 2015 and 2016 last week from the National Marine Fisheries Service (NMFS). The team will be processing these data and developing draft products for review later in the year. In addition, the RPB is monitoring the Mid-Atlantic RPB's development of products derived from vessel trip reports for potential inclusion in the Northeast Portal and for potential consistency across the two North Atlantic regions. The RPB is also working with NOAA's Greater Atlantic Regional Fisheries Office (GARFO) and the New England Fishery Management Council (NEFMC) to update fishery management area data that are already in the Portal. The RPB hopes to have all of these products reviewed in the fall and posted to the Portal after sufficient agency and stakeholder review.

Discussion

- NOAA's Northeast Fisheries Science Center (NEFSC) has taken a different approach to processing VMS data by using a model. In the long-term, would it be better to move the Portal to this version of data analysis and products? *It is a very good idea, especially as we talk about long-term roles for data stewardship.* Could we also compare the two methods to determine how much difference there actually is and how much time each one requires to prepare?
- The fishing industry's mindset about tracking with VMS and AIS has been changing over the last few years. For example, Maine has mandated trackers on fishing boats for enforcement purposes and this has been received by many fishermen relatively well. The industry is realizing that the lack of data about important lobster fishing area needs to be addressed.

Aquaculture

Aquaculture data comes largely from the states. An update to this theme should be available this summer and will include a new map showing shellfish management area classifications and permitted aquaculture sites.

Discussion

- Will this data include boundaries lines and open/closed areas? Is there more outreach



planned to the states and regulatory entities in each state (e.g. municipalities) around using the Portal for management? *The shellfish management area map shows approved and restricted areas, largely based on water quality. The permitted aquaculture site map can be difficult to maintain since areas are managed and permitted differently and permit status can change frequently. The RPB would like to hear the best way to engage folks in the industry and at the municipality level about how to keep these data up-to-date.*

Marine Transportation

This theme is one of the most popular on the Portal. It includes AIS data from 2011-2013. Different data products are the responsibility of different agencies and they take ownership for that maintenance with the assistance of the Portal technical team and the Marine Cadastre team. The RPB hopes to have many marine transportation datasets updated and available in the fall for industry and stakeholder review.

National Security

The Department of Defense and the USCG are committed to annually updating data products under the national security theme.

Cultural Resources

The Portal now contains a collection of National Historic Register sites. The Portal currently lacks archaeological data other than shipwreck data, but the RPB will work with tribes to get information about submerged archaeological resources up on the Portal when available, while being highly cognizant of confidentiality issues around cultural resources.

Recreation

This theme on the Portal can be difficult to develop and maintain because recreational activities vary significantly and there is limited existing spatial data that characterize the footprint of these different activities. New collaborations and projects since the Portal launched have helped fill many of these data gaps, but the RPB will need to identify opportunities for updating these data products and filling other gaps that still exist. The RPB recognizes the need to have discussions with stakeholders about how to develop and maintain recreational data in the short- and long-term.

Discussion

- Individual recreational activities are not listed on this slide as datasets. I am happy with the current data collection methods but is there progress toward including this data on the Portal? *This data is already in the Portal and the RPB is considering the best way to maintain it. For example, new survey efforts (such as those that led to several recreational datasets on the Portal) will require additional grant funding and support from recreational organizations. In addition, the RPB is planning to develop new recreational data layers, such as a beach visitation layer.*

Energy and Infrastructure

This theme has two subthemes: planning area status (operational, permitted, leased areas, etc.) and existing infrastructure (cables, pipelines, etc.). This theme will be updated this spring or summer because the status of some of the planning and permitted areas has changed. We will



also continue to work with the Marine Cadastre team and others to update related data, such as the submarine cable data that were developed in partnership with the North American Submarine Cable Association.

Discussion

- Have the RPB and BOEM considered at what point in the process it is appropriate to put wind energy areas (WEAs) on the Portal even if their boundaries are not fully finalized? *(Mr. LaBelle, BOEM) Posting a WEA on the Portal depends on a state task force's findings; they usually decide when this will happen. WEAs are also posted to the Marine Cadastre when the Department of the Interior (DOI) determines the information is ready. Therefore, posting on the Portal and the Marine Cadastre could coincide. There is an ongoing debate about whether to put early versions of WEAs on the Portal and narrow them down later, or wait until the boundary of the WEA is firmer.*

Offshore Sand Resources

BOEM in collaboration with USACE and the New England states has been surveying offshore sand resources for a few years as it seeks to proactively identify sand resources for future use. The RPB will incorporate this data into the Portal once it is finalized.

Restoration

This theme on the Portal will be updated with potential restoration sites on an annual basis.

Additional comments and discussion on the Portal

- The Portal is a great resource for research projects. For example, NOAA recently published a story on research products that utilized the Marine Cadastre. The RPB may want to advertise the Portal to the research community if it is not doing so already.
- In the BOEM Environmental Studies Program, what is the status of looking at Northeast priority data needs and how can the Portal help? *(Bob LaBelle) BOEM is about to publish a call for FY19 studies. The RPBs will receive early information about how they can respond to that call. BOEM is also interested in hearing feedback on the FY18 studies.*
- Data on lobstering activity are missing from the Portal. Data are reported for fishery management purposes, but the spatial resolution is too low to be useful for ocean planning purposes. It could be useful to get lobstermen to put trackers on their boats for a year. ASMFC is also talking about VMS on all federally permitted vessels, including lobster boats. We have been looking for better lobstering data for years and it will take a top down request or approach to make it happen.

Stakeholder Updates

Various stakeholders offered a summary of their recent activities related to the Plan.

Island Institute (via their consultant, George Lapointe)

The Island Institute has been surveying lobstermen to learn about their use of the ocean. Asking about how lobstermen use the ocean and any conflicts they see, rather than specifics of areas fished or other potentially confidential information, allowed them to gather data that is useful in the planning context. The Institute surveyed approximately 30 Maine fishermen for this project



with two phases of questions:

- Phase 1: How do you use the ocean throughout the year?
- Phase 2: How has your use changed over time? How would you respond to being displaced or having others come into your territory? How do you want the planning to go?

The report, “Lobsters and Ocean Planning: A spatial characterization of the lobster fishery for the New England Regional Planning Body”, was published in June 2016 and is available [here](#). The Institute has begun expanding this project to NH, CT, and MA and will follow a similar protocol.

Ocean Conservancy (Anne Merwin)

It is important to demonstrate how the Portal benefits a wide range of stakeholders - this is something the Ocean Conservancy is helping to accomplish. As staff from the new federal administration ask questions about ocean planning, we have an obligation to help them understand these efforts. We need to focus on how people are using this resource to make everyone’s job easier and to proactively address and resolve resource conflicts.

Fishing Industry (Richard Nelson)

The RPB and stakeholders need to promote doing the right thing in the ocean, not just provide datasets. We must exercise leadership and instill this effort in others. We have not succeeded with the Plan’s third goal of compatibility. We can certainly show conflicting uses, but we do not have the means to resolve them within the Plan and its implementation. Proposed projects in Long Island Sound, off Monhegan Island, and off Massachusetts are conflicting with our fishing grounds. Fishermen feel like we are losing our fishing grounds despite this planning effort. With increased sand management, aquaculture, and potentially oil drilling, we are feeling this even more acutely. Data is important but some of the Plan’s goals are being left behind with this focus on the Portal. *We recognize your concern. The Portal is simply a tool – a tool in development – and conflicts will continue to arise despite its existence. We have a genuine commitment from our federal staff to understand and use the Portal in our everyday business. For example, as we heard today, the USACE, a key permitting agency, is using the Portal. This is an important step forward. Industries like aquaculture are actively looking for ways to co-locate with other industries and ocean users. We are asking stakeholders for their patience with this effort.*

Another stakeholder responded that the RPB should point to the Portal and how it is or can help with coordination when conflicts arise, such as how BOEM is working with fishermen.

Northeast Ocean Data Portal: Updating Marine Life, Habitat, and Important Ecological Area Data Products

Emily Shumchenia, contract staff to the RPB, presented an overview of RPB progress updating and developing draft data products for marine life, habitat, and each of the components of ecological importance.

Marine life and habitat data products noted in the Plan were described along with estimated timelines for updates and development. The fish biomass dataset for Long Island Sound is one



data product that was recently completed with the assistance of the Connecticut Department of Energy and Environmental Protection and added to the Portal in April 2017. Updates to the regional eelgrass coverage are underway and will likely be completed by summer 2017. Data products that will be updated or developed this fall include marine mammal models, sea turtle model(s), avian species maps, benthic habitat maps, and phytoplankton bloom maps. Data products that could also be developed and/or updated by the end of the year, pending input from data providers, include fish trawl data for coastal Rhode Island, additional marine life ecological groups, and scallop maps using data from the Virginia Institute of Marine Science.

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 the five components from the Important Ecological Area framework (IEAs). 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

Since the completion of the Plan, the RPB and MDAT have revised the data for Components 1 and 2 according to feedback received during discussions with the RPB, the EBM Work Group, and the public at the public EBM Work Group meeting held in Boston, MA in July 2016. The RPB and MDAT have also begun considering methods and developing or incorporating additional data products that are pertinent to Components 3-5. This work focused on assembling all available (published, peer-reviewed) data and established methods that are relevant to each Component. As a result, there are now more than 100 individual data layers that potentially address ecological importance under each of the five components. Many of these datasets are already included on the Portal, but each needs to be reviewed for its appropriateness in the context of the IEA framework. In addition, the RPB is exploring ways to most effectively obtain feedback from experts and the public about the draft data products and potential methods for the IEA framework.

Discussion

Participants made the following comments and asked the following questions. Responses from ocean planning staff are italicized:

- What is the temporal resolution of the data products? *The temporal resolution depends on the data product. For example, the cetacean models use data from about 1992-2014. We are currently in the process of updating those models with new data (~2010-2016) from the Atlantic Marine Assessment Program for Protected Species (AMAPPS), and so we have the opportunity to potentially remove some of the oldest (early 1990s) data in the models and replace them with newer data. If we decide to do this, it could allow the models to better represent current distribution and abundance. We are working with experts to determine the best way to update the cetacean models (Jesse Cleary, Duke University, MDAT).*



- How will discussion of the use of these products inform building the datasets? *The current phase of this work is focused on understanding the individual data products and the potential methods used to develop them. The RPB will continue to discuss the potential use of these data products as guided by the Plan.*

Northeast Ocean Data Portal: Breakout Sessions to Review Recent Updates

Participants broke into two groups to explore some of the draft IEA data products and potential methods that the RPB and MDAT have assembled. Within each group, the planning team highlighted:

- The “[Draft Interim Guide to Draft Data Products and Potential Methods for the Important Ecological Area Framework](#)” includes important information about each draft data product and potential method, such as resolution and map units, and references to reports and papers that explain the source data and methods used to develop each product.
- Draft data products for each Component are separated into categories that help organize the data. A tool allows users to provide feedback on the different data sets available. They can also highlight gaps or artifacts they find in the data.
- The RPB and MDAT have prepared concise questions about each Component and category that will help assess each draft data product and potential method.
- A “Participate” tab on the side bar allows users to explore and provide feedback on datasets.

Discussion

Participants in the break out groups made the following comments and asked the following questions. Responses from ocean planning staff are italicized:

- Expert review
 - Who are the experts? *Several of them are in the EBM Work Group, but others are agency scientists who have either collected or analyzed some of the draft data products or developed the particular methods for draft data products that we have assembled.*
- Methodology
 - I am interested in the pros and cons of the different methods the Portal employs to build a map. Sometimes the source data for two maps is the same but the metric for how you built the map varies. For example, with fish species data, the RPB should determine where are the sampling biases and what is the best biodiversity metric.
 - What is the methodology for the year range chosen when a new dataset is added? *For many of the draft data products, we considered what data are available and were guided by the Marine Life Work Groups and agencies in determining what temporal resolution or range was appropriate or needed for planning. We are asking for input on whether products with finer resolution should be developed.*
 - It’s important that users are aware of the data sets’ temporal, geographic, and seasonal range of data, since the ocean can be so variable.
 - What is the approach for identifying thresholds for each of the datasets? *We have*



not looked at thresholds. We are focused on obtaining feedback on the methods used to develop the products themselves. This topic will be discussed at the RPB meeting at the end of May but we are not looking to draw lines around areas; our methods differ from the Mid-Atlantic RPB approach in this. Currently, we are just interested in seeing how this data can be useful to everyone.

- Exploring the data
 - How do we know which areas are data poor? *Right now, we have a qualitative understanding of data-poor areas, by overlaying all of the draft data products and looking for gaps. We also recognize that data quality and coverage depends on the taxa, species, or habitat (some are sampled more than others). We are exploring ways to quantify data coverage.*
 - It is very important to the planning process to document existing data gaps. Everyone should have a common understanding of what these maps represent and what they do not represent. One way to display this would be to include notes or metadata that say: “There are 82 fish species included in this map but we are missing data on 20 other species.”
 - Data for rare, protected, and listed species can be difficult to collect. Can the Portal use data on these species’ habitat preferences to build a map? *Pat Halpin’s lab at Duke University (MDAT), NOAA, and the Navy have done a lot of work on this issue by looking at biologically important areas for whales and dolphins.*
 - It is important to make available, to the extent possible, the underlying data sets from which synthetic maps or products are created so users can themselves review that data and consider what it means to them.
 - It is important to separate out Right Whale data from other marine animals. We don’t want to wash out rarity and ESA issues with more abundant species.

Draft Approach for Evaluating Plan Performance

Returning to the two tracks established in Chapter 4 of the Plan, Mr. Napoli elaborated on how the RPB plans to monitor the implementation of the Plan. The RPB has developed an initial approach for monitoring the plan’s performance. This approach summarizes principles from the Plan:

- 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 (Chapter 3)
- Inform regulatory and management decisions (Chapter 3)
- Enhance agency coordination (Chapters 3 and 4)
- Advance regional science and research priorities (Chapter 5)



The planning team hopes to obtain stakeholder feedback on the materials provided about this approach in advance of the RPB meeting at the end of May. A decision about moving forward with this approach will be made at the RPB meeting.

Discussion

Participants made the following comments and asked the following questions. Responses from ocean planning staff are italicized:

- Stakeholder engagement
 - A desired outcome of many participants was earlier and successful stakeholder engagement – where does this fit in the four categories just described? *Early and successful stakeholder engagement is a desired outcome of many of the Plan actions, and therefore it is included in each of the four major Plan action categories.*
 - Could there be a category for public satisfaction in the Plan’s success and activities? This could show how results are matching up with stakeholder hopes for the Plan and be an additional opportunity to demonstrate how the public is involved in the Plan process and implementation. The RPB should consider stakeholder satisfaction with the planning process itself, in addition to focusing on just individual agency decisions and actions that are informed by the Plan.
 - The RPB should include a metric for commercial and recreational fishery involvement.
 - It is important to connect stakeholder satisfaction with overall satisfaction in this Plan. Agencies are only some of the stakeholders of this Plan. This is much more than just checking the boxes on hosting a “good meeting”. I am concerned that I am not seeing all the stakeholder concerns voiced during this process included in this approach, nor opportunities for all non-agency stakeholders to be involved.
 - *Stakeholder engagement will be a consideration during implementation of each of the Plan actions, but stakeholder satisfaction with the planning process is an additional factor for RPB consideration.*
- Suggestions to improve the draft approach and other questions are summarized below.
 - Consider including a socioeconomic indicator or indicators.
 - For each row on the Relevant Goals and Objectives table on Slide 38, is the planning team planning to fill in indicators? *Yes, eventually, after stakeholder input and RPB approval of the general approach.*
 - The planning team should include concrete deadlines for completion of specific pieces of this Plan. They could include something like “We want to see success on 10% of these by 2020”. Having a goal is important for staying on track and keeping oneself accountable. Otherwise, the RPB risks letting Plan components fall by the wayside.
 - Could permitting times be an indicator considered within this framework? *Yes, that is the type of indicator that could be considered under the “inform regulatory and management decisions” and “enhance agency coordination” categories.*
 - This is a question of outputs versus outcomes. Do the RPB members have an easy way to look at outputs at the end of this process? This would feed into the



- outcomes.
- Is the RPB meeting on May 24 going to focus on principles of the implementation plan or specific indicators? *The planning team needs approval from the RPB on this approach before we discuss specific indicators.*
 - This plan is about operationalizing the use of this information and developing best practices. We need to embed this new behavior (i.e. using the Portal) in our existing operations. We need regulatory staff to bless this approach and then we can get specific with the people who really need to be operating differently.

Overview of One Approach for Monitoring Ecosystem Changes: The Ocean Health Index (OHI)

Jamie Afflerbach of the University of California at Santa Barbara (UCSB) presented the Ocean Health Index (OHI) methodology and a proposed approach for tailoring the OHI to the Northeast region. The presentation reflected initial engagement with the RPB and RPB contract staff.

Methodology overview

The OHI defines a “healthy” ocean in human-centered terms: as “one that sustainably delivers a range of benefits to people now and in the future.” Socio-economic and biological elements are both included in the Index. The Index can be adapted to the chosen region and stakeholders can help define their ocean benefits with defined and measurable goals. The OHI is comprised of ten goals that apply to the global OHI, but they may apply differently in different regions and are not an exhaustive list. They could be modified depending on the region where OHI is applied and according to local priorities:

- Food provision
- Artisanal fishing opportunities
- Natural products
- Carbon storage
- Coastal protection
- Tourism and recreation
- Livelihoods and economies
- Sense of place
- Clean waters
- Biodiversity

For each goal, the OHI score considers the status and likely future state for that goal. Describing the current status requires identifying a target or baseline for each goal. The likely future status takes into account the trend over the past 5 years, pressures that act on the goal, and resilience measures for the goal.

Scores are calculated for each goal within each OHI region or sub-region. A composite OHI score represents the average of all ten goals’ scores, though goals can be weighted differently. At the global scale, the OHI team has been able to calculate an OHI score for each coastal country for every year since 2012.



Discussion

Participants made the following comments and asked the following questions about the OHI's methodology. Responses from the OHI team are italicized:

- We often have less confidence in old data. How does the OHI handle this problem? *We try to use consistent data, particularly in 10-15 year time spans. We can also interpolate between years if necessary.*
- How have government agencies used the OHI so far? *The OHI has been primarily used in an academic setting. Some countries have done their own assessments using training modules that the OHI team has produced, but we were not involved directly in those efforts. For example, Columbia reorganized their ministries to collect the data needed for this assessment. China has also tried re-evaluating how they collect and organize data.*
- Does the final score weight the ten goals equally? *Yes, but we can adjust weighting by goal if desired.*
- What does carbon storage mean here? *This goal refers to the ocean's function as a carbon sink.*
- How well one is doing compared to one's goals seems to depend on the target one chose. *That is true. We are hoping to work with the RPB to set these targets and would like to hear input from the participants at this forum. Target setting is the biggest part of what we do for a new Index.*
- If we can tailor goals and targets to a region, then we run the risk of tailoring the questions to get the answers we want. *In a science setting, we can use "SMART principles" to make targets ambitious yet realistic and measureable. We can identify where in the realm of targets you should be, although the socially-oriented goals can be harder to determine.*

Tailoring the OHI to the Northeast

The OHI team identified topics for which RPB and public input could be used to inform an OHI applied to the Northeast region. The first two priority topics are:

1. Identifying reporting regions
2. Relating/modifying existing OHI goals to Plan priorities

In determining their reporting regions for the Index, the team seeks to balance biophysical boundaries with management boundaries and the scale of decision-making with the scale of data availability. The team has developed a draft map of potential reporting regions as options for RPB and stakeholder consideration, such as designating Long Island Sound as its own reporting area. The team would like feedback on the proposed reporting areas.

The OHI team has reviewed the regional priorities expressed in the Plan to begin to determine how a Northeast OHI could be developed. Some priorities expressed in the Plan have a clear match with typical OHI goals, but other Plan priorities (e.g. national security, offshore sand, energy and infrastructure) do not have a clear match to an existing global OHI goal. The OHI team is seeking input on the best way to engage the RPB and obtain feedback from regional stakeholders on goal setting for a Northeast OHI.



Discussion

Participants made the following comments and asked the following questions about tailoring the OHI to the Northeast. Responses from the OHI team are italicized:

- Delineating reporting regions
 - We should discuss the pros and cons of using the 3-mile line between state and federal waters as a set of boundaries for reporting regions.
 - Long Island Sound and NY are included in the draft map of reporting regions. Are representatives from NY included in OHI discussions in their capacity as ex-officio members of the RPB? The team should consider overlap between the Northeast and Mid-Atlantic ocean planning regions, although the goals may vary. *This is a question we need answered – where do we draw the line?*
 - Why would we have sub-regions in the first place given a planning boundary has already been drawn that we can readily use?
- Goal and target setting
 - How do we separate out national security, sand, and infrastructure from the other goals? They are intertwined. And perhaps they do not directly relate to ocean health. *These three topics have not explicitly been in an OHI assessment before so we need input on this. Do we incorporate these priorities into a Northeast OHI and then set targets? National security is a hard one – “no net loss of access” is an example target. But we would need to decide if this target is measurable and if we want to track it. This is the kind of decision we need informed by the RPB and stakeholders.*
- Alignment of reporting regions with goals and scores
 - How do you use these sub-reporting regions? Does each region get its own goals and score? *It is important to consider at what level decisions are being made. Is it happening at the state or federal level? It is also important to consider if this is a functional (ecosystem or human activity) boundary, regardless of the political boundary. We want to hear at what level this reporting will be most useful to stakeholders. For example, a clean water goal might be relevant at a different distance offshore than a food provision goal.*
 - How does the OHI assign different issues to the same set of reporting region boundaries? Political boundaries may work for certain issues while bathymetric contours may work better for other issues. I am concerned that something will get lost in this process. *On the west coast, we addressed this issue by reporting on state boundaries but including different types of reporting for different goals. We just have to be really explicit when we report where our boundaries were and what datasets we used.*
- Using the OHI results
 - This Index appears to risk maximizing one goal while minimizing another. For example: maximizing fishing industry health while minimizing habitat health. Do the OHI average scores make us lose sight of the tradeoffs? How can the average be a meaningful measure? *This is a key question. This gets at the problem of communicating multiple datasets using one number. This one number may not be useful for many scientists and regulatory agencies, but the public might be interested in watching how a number changes over time. It can be a useful*



communication tool. We want this tool to be accessible and average scores can help us achieve that. We always report a lot more information with that one number and we want people to dig in to the information. But it is important to be clear with our assumptions.

- Stakeholder engagement
 - How can we make sure this is a region-wide effort? *We want to host a workshop to obtain input on reporting regions and goals. This initial feedback could help inform a potential subsequent workshop. We want to know the best way to interact with stakeholders.*
 - When do you need comments from stakeholders? We also need a clearer idea of the specific questions you are asking us to answer. This is the best way to get stakeholder input.
 - Stakeholder engagement seems critical for generating final ocean health scores with meaning. How have you engaged in other places at this scale? *We do not want this project to be seen as an external effort only. In British Columbia, we addressed this by holding workshops with representatives from the Province, First Nations, the fishing industry, and other stakeholders. We want stakeholder input throughout the process but we will also be taking guidance from the RPB.*
- Funding stream and alternative models
 - At the last stakeholder meeting, the OHI was presented as a potential option for monitoring ecosystem health, and it seems like the same presentation is being made today. What is the status of the decision to use OHI in the Northeast region? *(Mr. Napoli) This project was incorporated into the Plan as one measure among others (e.g. EPA and NOAA also have programs). The OHI team has its own funding from the Moore Foundation, among others, to develop an OHI for the Northeast region. They are just getting started here and we hope to get more direction from the RPB and stakeholders at the upcoming RPB meeting to inform how this project will proceed.*
 - Is the RPB looking at other approaches to monitoring ecosystem changes? *(Mr. Napoli) The Ocean Health Index and the Integrated Sentinel Monitoring Network (ISMN) are the two efforts specifically mentioned in the Plan. The ISMN is currently unfunded. As discussed, the OHI has its own funding sources and could be focused on ocean planning priorities. I do not think the Plan specifically mentions other efforts, but many of the agencies, such as EPA and NOAA NEFSC, have existing efforts that could be leveraged to inform ocean planning even though they were not specifically designed to address ocean planning priorities.*

Next Steps

Mr. Côté wrapped up the forum by thanking the organizers for their efforts and thanking participants for joining the discussion today. He emphasized that he heard the message from participants about the need for stronger stakeholder engagement in Plan implementation, and asked for patience with this process. Mr. Côté concluded by publicly recognizing Bob LaBelle's service to this planning effort and wished him well as he leaves federal service later this month. The next public RPB meeting will be held on May 24, 2017 at NOAA's GARFO office in Gloucester, MA.



Appendices



Appendix A: Forum Attendance

Name	Affiliation
Jamie Afflerbach	Ocean Health Index, NCEAS, UCSB
Michelle Bachman	New England Fishery Management Council
Priscilla Brooks	Conservation Law Foundation
Aimee Bushman	Conservation Law Foundation
Beth Casoni	Massachusetts Lobstermen's Association
Alison Chase	Natural Resources Defense Council
Rebecca Clark Uchenna	Island Institute
Jesse Cleary	Marine Geospatial Ecology Lab, Duke University
Corrie Curtice	Marine Geospatial Ecology Lab, Duke University
Ian Dombroski	EPA Region 1
Susan Farady	University of New England
Jennifer Felt	Conservation Law Foundation
Marianne Ferguson	NOAA National Marine Fisheries Service
Patrick Field	Consensus Building Institute
Melissa Gates	Surfrider Foundation
Rebecca Gilbert	Consensus Building Institute
Brent Greenfield	National Ocean Policy Coalition
Anne Hawkins	Fisheries Survival Fund
Roselle Henn	US Army Corps of Engineers North Atlantic Division
Heather Hopkins	Department of the Navy
Onni Irish	United States Coast Guard
Jessica Joyce	Tidal Bay Consulting, LLC
Robert LaBelle	Department of the Interior BOEM
George Lapointe	George Lapointe Consulting
Daniel Martin	National Oceanic and Atmospheric Administration
Jennifer McCarthy	U.S. Army Corps of Engineers
Sally McGee	The Nature Conservancy
Martina McPherson	ERG
Stephanie Moura	SeaPlan
Nick Napoli	Northeast Regional Ocean Council
Richard Nelson	Commercial fisherman
Betsy Nicholson	National Oceanic and Atmospheric Administration
Jeff Payne	NOAA Office for Coastal Management
Marta Ribera	The Nature Conservancy
Courtney Scarborough	NCEAS, UCSB
Emily Shumchenia	Northeast Regional Ocean Council
Peter Taylor	Waterview Consulting



NORTHEAST OCEAN PLAN

Chris Tompsett	United States Navy
Amy Trice	Ocean Conservancy
Jenna Valente	American Littoral Society
Christian Williams	New Hampshire Coastal Program
Sarah Winter Whelan	American Littoral Society
Sarah Wolfskehl	NOAA OCS IOCM



Appendix B: Forum Agenda

Northeast Regional Planning Body

Stakeholder Forum

Tuesday, May 2, 2017, 9:30am to 3:30pm
Portsmouth Public Library, Portsmouth, NH

Meeting Objectives

- Provide updates and discuss progress implementing the Northeast Ocean Plan, with a focus on RPB initiatives to:
 - Use, maintain and update the Northeast Ocean Data Portal
 - Advance aspects of plan performance monitoring and evaluation
- Obtain feedback on progress to date and on potential next steps to inform decisions at the Northeast Regional Planning Body Meeting on May 24

Agenda

- 9:00am** **Registration**
- 9:30** **Call to Order and Agenda Review** – *Patrick Field, Consensus Building Institute, Facilitator*
- 9:35** **Objectives of the Day and Major Recent Milestones** - *Mel Coté, (U.S. Environmental Protection Agency, Federal Co-lead) and Ted Diers (NH Department of Environmental Services, State Co-Lead)*
- 9:50** **Northeast Ocean Plan Implementation Update** – *Nick Napoli (contract staff to NE RPB)*
Presentation and brief discussion about the work plan for implementation
- 10:10** **Northeast Ocean Data Portal: Maintenance and Use of the Portal** – *Betsy Nicholson (NOAA) and Nick Napoli*
- Overview of the approach to maintain the Portal and initiatives to communicate the value of the Portal, including the development of case studies characterizing the range of uses of the Portal
 - *Questions and Discussion*
 - *Comments from the audience specifically about how they are using the Portal*
- 10:40** **Northeast Ocean Data Portal: Updating the Ocean Activity Data on the Portal** – *Nick Napoli*
- Overview of RPB activities to update and maintain specific ocean activity data themes, including related stakeholder outreach
 - *Questions and Discussion*



- *Suggestions from the audience about outreach to inform product updates*

11:10 Stakeholder Updates

Stakeholders can share brief updates on their work related to the Northeast Ocean Plan

11:45 Lunch (on your own in Portsmouth, NH)

1:00 Northeast Ocean Data Portal: Updating Marine Life, Habitat, and Important Ecological Area Data Products – Emily Shumchenia (contract staff to the NE RPB)

Overview of RPB activities to update draft data products for marine life, habitat, and the components of ecological importance, and to obtain input on draft products and methods

1:10 Northeast Ocean Data Portal: Review Recent Marine Life & Habitat Data Updates and Draft Important Ecological Area Data Products and Methods – Emily Shumchenia, Jesse Cleary (Duke University) and Corrie Curtice (Duke University)

Move to three break-out groups for in-depth presentation and discussion about draft products and methods

1:50 Break

2:00 Draft Approach for Evaluating Plan Performance – Nick Napoli

- Presentation of draft approach for evaluating plan performance
- *Questions and Discussion*

2:30 Overview of One Approach for Monitoring Ecosystem Changes - The Ocean Health Index (OHI) – OHI Team (University of California, Santa Barbara)

- Presentation on overall OHI methodology, work plan, and initial tasks
- *Discussion, questions and feedback on tailoring the OHI approach to the Northeast*

3:15 Next Steps

3:30 Adjourn