NORTHEAST REGIONAL OCEAN PLAN: OPTIONS FOR EFFECTIVE DECISION MAKING

Report prepared for the
Northeast Regional Planning Body

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TABLE OF CONTENTS

INTRODUCTION

The Northeast Regional Planning Body (RPB) is responsible for developing an ocean plan for Northeast ocean waters, pursuant to the National Ocean Policy. As described in the Framework for Ocean Planning in the Northeast United States, the RPB has established three overarching goals for the ocean plan: 1) healthy ocean ecosystems; 2) effective decision making; and 3) compatibility among past, current, and future ocean uses.[1] The goals address distinct but interrelated interests and are based on a common foundation of data and information about the marine ecosystem and human activities – the development of which is a major aspect of the planning process (see the Northeast Ocean Data Portal at www.northeastoceandata.org). This paper presents options to advance the effective decision making goal, with a focus on enhanced agency coordination and on how data and information in the ocean plan can be used by federal, state, and tribal governments to more effectively achieve the objectives of their existing management authorities.

To help guide this work, the RPB established a work group that includes federal and state agency representatives. Because the National Ocean Policy directs that any regional ocean plan will be implemented through existing federal law, the work group is focusing on the implementation of existing authorities under: 1) the National Environmental Policy Act (NEPA), which provides for the public review and evaluation of potential effects of proposed activities in the ocean; 2) the U.S. Army Corps of Engineers (USACE) permitting process, by which proposed activities are reviewed for their potential impacts to the marine environment and existing human activities; and 3) the Outer Continental Shelf Lands Act (OCSLA), which authorizes the federal government to lease the seabed under federal waters for energy and marine minerals activities.[2] Additional federal and state ocean resource and management authorities are discussed in this paper as well, but these three federal statutes and programs are core authorities for management of uses of the ocean's public resources and space.

[1] See Framework for Ocean Planning in the Northeast United States, Northeast Regional Planning Body, for background information on the RPB, the planning process, and discussion of the goals, objectives, and actions related to the regional marine planning process, available at www.neoceanplanning.org.

[2] Here and throughout the paper, descriptions of statutes and regulations are intended to generally characterize the subject matter. For detailed and authoritative materials, please follow the links, or see Additional Information, below.

The RPB also includes representatives from federally-recognized tribes. Tribal discussions of topics related to the Effective Decision-Making goal are proceeding and are the subject of a separate, parallel effort.

NEPA review and the USACE permitting process address the broad range of issues related to the effects of ocean development and provide substantial opportunities for public review and comment. In federal waters (generally, more than three miles offshore) OCSLA directs the review of development of offshore wind energy, and marine sand and gravel resources. There is currently substantial interest in the Northeast region to develop offshore wind energy, and growing interest in sand and marine resources for state and federal beach nourishment.

The ocean plan is not a regulatory document; consequently, the work group's charge is to develop options to improve agency decision making under existing authorities through the use of data and other baseline information, interagency coordination, and enhanced public and stakeholder participation.

The options provide process efficiencies based on the use of new data and information, advance the ability of agencies to use new knowledge to accomplish their missions, and enhance transparency and access to information and future decision making based on information developed through the public planning process.

The options presented here were developed based on discussions with federal and state agencies and regulatory professionals from marine industry and public interest organizations. They will be presented for public review and comment and for consideration by the RPB, who will decide on preferred options to pursue as the ocean plan is developed. The report presents options for the following three topic areas:

- Develop coordination measures and agency guidance to address NEPA and regulatory processes and actions;
- Use ocean plan data and information, including the Northeast Ocean Data Portal, to inform review and permitting processes; and
- Develop federal consistency review efficiencies to support state and federal objectives under the Coastal Zone Management Act (CZMA).

To enhance the implementation of existing authorities for ocean activities, the RPB is seeking to improve the connection between the data (information) and decision-making (process) components of managing ocean development activities. The options discussed here, and the ability to consider any kind of enhanced management capacity in the ocean plan, are possible because of a significant investment in developing and

providing access to new data and new data products, and the commitment by the RPB to improve the use of the information.

Finally, there are aspects of environmental review that also require consultation with tribes through Section 106 of the National Historic Preservation Act. This topic is the subject of a separate effort that is underway by the RPB to develop best practices for such consultation. As a result, this topic is not the focus of this paper, although there are references to tribal coordination and information where appropriate.

SUMMARY OF KEY THEMES FROM INITIAL MEETINGS

The RPB hired a team led by SeaPlan to assist in further developing options under the "Effective Decision Making" goal. The agency work group then held a preliminary discussion to further frame the subject matter. High-level themes that emerged from this discussion included:

- The value of high-quality spatial data at a regional scale to agencies, project applicants, and stakeholders early in the review process to identify further details associated with siting, scoping of the need for further information and data;
- Recognition that the effectiveness of existing coordination mechanisms can be improved, in part based on the availability and analysis of better data;
- The importance of working within existing authorities and leveraging existing coordination mechanisms as much as possible; and
- Recognition that a 'one size fits all' approach will not be possible; different kinds of projects and programs have different data and coordination needs and may be at different levels of maturity in New England. (The Northeast has limited experience with ocean energy, aquaculture in federal waters, and sand and gravel extraction in federal waters, and no experience with carbon sequestration.)

RPB planning staff then met with federal and state agencies to discuss in detail how spatial data and agency coordination could support their specific missions and interests. In addition to specific comments and recommendations reflected in the options below, discussions reflected the region's on-the-ground reality of carrying out existing mandates. Additional broad planning-related issues from these discussions with federal and state agencies included:

- Under existing management and regulatory framework (in the absence of an ocean plan), 'broad and shallow' data is more useful at a regional scale than 'narrow and deep' data;
- There are substantial efficiencies to be gained (using an ocean plan as the vehicle) from using new data products to develop and implement authoritative materials

to support management and regulatory processes, including specific data sets, baseline reference materials, and programmatic regulatory consultations;
- States have a strong interest in the management of activities in waters that are used by their constituencies. This interest includes activities in federal ocean waters (described by one state as "more like 0-30 miles than 30-200 miles"); and
- Strong interest in better identifying and coordinating with ocean users in both on-going management activities and project-specific reviews.

In parallel meetings with regulatory professionals from marine industry and public interest organizations to learn their perspectives, discussion addressed issues that included:

- Strong interest in using data and information to evaluate existing activities and resources in a comprehensive manner to inform project development and review decisions;
- The need for clarity and predictability in planning and regulatory process and outcomes, for example by developing a pre-application process that incorporates high-quality baseline data, provides access to agency and stakeholder expertise, and results in clear direction for project proponents and agencies alike, but that allows for project-specific flexibility in how the process is managed;
- The importance of using data and information to identify and protect important areas of existing human activities (such as commercial fishing and shipping, recreation) and important ecological areas;
- The value of identifying and consulting with affected stakeholders early in any development process; and
- An emphasis from industry that the primary values associated with the ocean plan are access to new data and information, and clarity and predictability under existing authorities.

In summary, the options described below reflect the strong and consistent expression (made collectively and in individual discussions) that the outcome of actions under the effective decision making goal should be to:

- Help agencies do their jobs better;
- Make the regulatory process clear and predictable; and
- Identify and protect important areas of existing activities and important ecological areas.

SUMMARY OF AUTHORITIES AND DATA USE

All development activities in the region, including energy infrastructure, sand and gravel extraction, aquaculture in federal waters, and carbon sequestration, are subject to

NEPA compliance and similar regulatory review and data requirements under USACE permitting. At a minimum, distribution and abundance data at a regional scale for whales, turtles, fish, and birds as well as for other human activities—all of which is underway as part of the regional ocean planning process—will provide a baseline context for each of the authorities. Further, as outlined in the options below, specific data products and management tools based on distribution and abundance data (best available data sets, baseline reference material, and regulatory consultations) can do more to enhance existing review and permitting. For example, distribution and abundance data will help identify spatial concentrations of jurisdictional resources (and human activities) that will help the NEPA review and regulatory processes avoid, minimize, and mitigate potential impacts.[3]

The NEPA review and USACE permitting processes for marine development activities involve the following:

- NEPA review, which includes consultations with resource agencies with subject matter jurisdiction; permitting cannot occur until NEPA review has been completed;
- State review under the CZMA; and
- USACE permitting under the Clean Water Act and/or the Rivers and Harbors Act.

In summary form, the core authorities include:[4]

- The **National Environmental Policy Act** requires "federal agencies… to determine if their proposed actions have significant environmental effects and to consider the environmental and related social and economic effects of their proposed actions."[5] NEPA applies in state and federal waters, as well as to terrestrial activities, to federal actions such as leasing of public lands (e.g. through OCSLA) and permitting development proposals (including USACE permitting), adoption of fishery management plans, and other federal activities. The NEPA process generally is the first process that federal agencies implement in permitting and leasing actions (in some cases, NEPA and permit processes run concurrently). The NEPA process uses data and information from agency and public participation to identify the potential impacts of a proposed action on the environment, evaluates potential alternatives that could have less impact, and identifies means by which

[3] While beyond the scope of this paper, this provides the foundation for work under the RPB's Healthy Oceans and Coastal Ecosystems goal to evaluate potential options for identifying important ecological areas.

[4]Numerous other authorities may apply depending on the type of activity.

[5] *A Citizen's Guide to the NEPA,* Council on Environmental Quality, December 2007

unavoidable impacts can be minimized and mitigated. The lead federal agency is responsible for implementing the NEPA process and will engage the public, other federal agencies (sometimes formally designated as cooperating agencies to establish a formal coordinating relationship among agencies), and outside parties. If the extent and magnitude of impacts to the environment are unknown, the agency prepares an Environmental Assessment (EA). If the lead agency initially or through the EA process determines that there are likely to be significant impacts, the agency must prepare an Environmental Impact Statement (EIS) to evaluate project alternatives and identify measures to avoid, minimize, and mitigate impacts.

Use of data

NEPA provides administrative flexibility in how lead federal agencies implement review, and each agency has established procedures (including guidance and regulation) to guide the process. Regardless of the administrative process, regional ocean plan data can provide a consistent informational framework for the review of proposed development projects. Plan data could inform key elements of NEPA review, including scoping (which identifies key stakeholders, issues, information gaps and needs, and other consultations that need to occur), identification of project alternatives, evaluation of environmental effects, description of the affected environment, and development of mitigation measures. For example, see here for an illustration of how the Department of the Interior's Bureau of Ocean Energy Management (BOEM) administers NEPA and other reviews over the course of the leasing process.

- The **Rivers and Harbors Act, section 10,** administered by the USACE, provides for the review of work and structures below the mean high water line of waters of the United States out to the 3 mile limit, and of fixed structures beyond the 3 mile limit.

  Use of data

  As a component of permitting under both the Rivers and Harbors Act and the Clean Water Act, the USACE conducts a "public interest review" to evaluate "the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest."[6] The review addresses a wide range of natural, cultural, social, economic, and other issues, including, generally, "the needs and welfare of the people."[7] Plan data could provide

[6] 33 C.F.R. §320.4

[7] Ibid.

strong support for the USACE review. Plan data should provide relevant information for existing and/or potential human activities, including commercial shipping, recreational fishing and other activities, commercial fishing, existing infrastructure including cables and pipelines, and others.

- The **Clean Water Act, section 404,** administered primarily by the USACE, in consultation with the EPA (which has a formal jurisdictional role), provides for the review and authorization of impacts of dredged or fill material on the marine ecosystem below the high tide line of waters of the United States out to the 3 mile limit, in consultation with federal resource agencies which have subject-matter jurisdiction to evaluate potential impacts to jurisdictional resources.

  Use of data
  The Clean Water Act section 404(b)(1) Guidelines identify the information and analysis used to determine whether a proposed activity will have a significant adverse impact to the aquatic environment. The review addresses potential impacts to, among other things, the seabed, water quality, currents and circulation, endangered and threatened species, fish and other aquatic organisms, and other wildlife. In addition, the review addresses potential impacts to commercial and recreational fishing, water related recreation, aesthetics, and sanctuaries, refuges, and similar preserves.

  The Guidelines identify a category of resources called Special Aquatic Sites, which are subject to a regulatory presumption that a proposed activity will have less significant impact to the aquatic environment if it is not located in the Special Aquatic Site. Such areas relevant to the ocean plan include wetlands (saltmarsh), vegetated shallows (sea grasses), mudflats, and coral reefs. Plan data can support spatial definition of Special Aquatic Sites and provide baseline information to inform the review process.

Federal consultations required under the following federal laws inform NEPA review and Clean Water Act and Rivers and Harbors Act permitting:[8]

- The **Endangered Species Act (ESA),** administered by the Department of the Interior's U.S. Fish and Wildlife Service (USFWS) for terrestrial species and the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NMFS);

[8] Other authorities may apply depending on the type of activity. These represent the core resource consultations that typically apply.

- The **Magnuson-Stevens Act Essential Fish Habitat (EFH)** provisions, administered by NOAA/NMFS provide for the review of potential impacts to essential fish habitat for species managed, in the Northeast, by the Northeast Fisheries Management Council (and in Southern New England by the Mid-Atlantic Fishery Management Council);
- The **Marine Mammal Protection Act (MMPA),** administered by NOAA/NMFS, provides for the review of potential impacts to marine mammals and turtles;
- The **Migratory Bird Treaty Act (MBTA)**, administered by the USFWS, requires federal agencies to consult the Service about potential impacts to migratory bird species;
- The **National Historic Preservation Act, section 106 (NHPA),** administered by the Advisory Council on Historic Preservation, state historic preservation officers, and tribal preservation officers, provides for the review of potential impacts to cultural and historic resources;
- **Executive Order 13175, Consultation and Coordination with Indian Tribal Governments**, contains additional direction for federal agency consultation with tribes; and
- **Tribes may (or may not) have treaty rights that also apply.**

Use of data

Distribution and abundance data being developed for whales, turtles, fish, and birds could support better informed and more efficient ESA, EFH, MMPA, and MBTA consultations. The data also provide opportunities described in the options below to enhance these consultations by developing authoritative regional characterizations of resources and uses, reference data, and programmatic consultations. Baseline historic and cultural data developed to support consultation under the NHPA may be used to identify specific areas to avoid or flag as potentially sensitive (such as drawing upon the examples contained in the Rhode Island Ocean Special Area Management Plan to identify areas of potential tribal significance). Some data will not be represented due to sensitivity and/or confidentiality.

- The Coastal Zone Management Act, administered by NOAA's Office of Ocean and Coastal Resource Management/Coastal Services Center and state coastal management programs, authorizes states to review federal actions that have reasonably foreseeable effects to resources and uses of the state's coastal zone under the state's enforceable policies.

Use of Data

All data being developed through the ocean plan will support both state and federal interests under the CZMA. The ocean plan will be based on federal, state and tribal data and will enhance the use of existing state data by providing greater regional context for data and resource issues in state waters. It will also support more informed application of the "effects test" used to determine whether federal actions will affect uses or resources of a state coastal zone.

As described in the options, new data and information also provide opportunities to achieve management efficiencies such as regionally consistent state standards for activities such as deep water aquaculture in federal waters otherwise subject to individual state standards or regionally consistent approvals for particular federal actions. For example, under the CZMA section 307 federal consistency provision and NOAA's CZMA regulations (15 C.F.R. part 930), the ocean plan could support a regional general consistency determination for federal agency activities such as military training exercises, or for activities requiring a federal license of permit, such as meteorological towers associated with wind energy development.

SUMMARY OF USES

The purpose of this section is to provide a summary of key characteristics and issues associated with the major development activities that have been proposed and/or constructed in the Northeast. This summary is intended to provide additional background information for consideration when reviewing the options below.

ENERGY INFRASTRUCTURE

- Marine energy infrastructure (existing and proposed) in the Northeast is typically associated with natural gas terminals and pipelines, sub-sea electric cables, hydrokinetic (wave and tidal energy) demonstration projects, and as an emerging industrial-scale technology, wind energy facilities.
- BOEM manages the development of wind energy facilities in federal waters through an OCSLA leasing process and site development process administered by the Renewable Energy Program, which is conducting siting, environmental review, and leasing activities in the northeast region. BOEM has developed a range of data collection guidance to assist proponents in characterizing site conditions.
- The Federal Energy Regulatory Commission manages the development of hydrokinetic facilities (primarily associated with tidal current in the Northeast); one pilot project is in operation in the region and another is under review.

- The discussion of options below focuses on wind energy, but data and coordination mechanisms developed in the ocean plan will support all energy infrastructure siting and permitting processes.
- USACE issues Clean Water Act section 404 and Rivers and Harbors Act section 10 permits for construction. Section 404 does not apply in federal waters beyond the 3 mile limit.
- States have a planning role through BOEM process, and a review and concurrence role under CZMA for construction in federal waters. States often have both regulatory and proprietary (leasing) roles for electric cable connections and other infrastructure that cross state waters and state-owned submerged lands. Key issues involve differing perspectives about the balance of conservation and development and potential impacts of new infrastructure on resources and existing uses and activities in the marine environment.
- Primary regulatory interests include potential adverse impacts to seafloor habitat, avian resources, marine mammals and turtles, commercial fishing, and historic resources and cultural interests (including tribal issues and subsistence/sustenance fishing).

SAND AND GRAVEL EXTRACTION

- BOEM manages access to sand and gravel resources in federal waters through an OCSLA leasing process administered by the Marine Minerals Program.
- The location of suitable sand and gravel resources for coastal restoration and resilience projects is not well defined in the Northeast; BOEM is currently conducting an inventory of the resource in Atlantic coast federal waters.
- Sand and gravel extraction is fairly common in the Mid- and South Atlantic regions but not in the Northeast region, where regulators do not have experience with the activity.
- USACE issues Clean Water Act section 404 and Rivers and Harbors Act section 10 permits for construction. Section 404 does not apply in federal waters beyond the 3 mile limit.
- States have a planning role through BOEM process and a review and concurrence role under CZMA for sand and gravel extraction activity in federal waters. States are fully engaged in permitting and leasing (for activities on state-owned submerged lands) the use of the material on state lands and waters.
- Key issues include potential conflicts with commercial and recreational fishing and the process of allocating rights to extract a limited public resource.
- Primary regulatory interests include potential adverse impacts to seafloor habitat, protected resources (such as marine mammals and turtles), historic and cultural

resources including tribal issues and subsistence/sustenance fishing), and commercial fishing.

AQUACULTURE IN FEDERAL WATERS

- Deep water aquaculture refers generally to the culture of shellfish, finfish, or marine plants such as kelp that occurs in federal waters; current interest is focused on deep water, long line shellfish (mussel) aquaculture.
- The development of a functioning management framework needed to support a deep water aquaculture industry faces substantial policy and political challenges, but there is an opportunity to key issues, cited below, in the region.
- Deepwater aquaculture is regulated by the USACE under section 10 of the Rivers and Harbors Act, in consultation with NMFS.
- States have strong planning interest in siting determinations to minimize impacts to existing fisheries and a review and concurrence role under CZMA for construction in federal waters.
- USACE issues Clean Water Act section 404 and Rivers and Harbors Act section 10 permits for construction. Section 404 does not apply in federal waters beyond the 3 mile limit.
- Key issues include the need for ocean space to achieve an economically viable scale of operation, lack of authority for a process by which a developer may secure a lease and resulting site control, and the need for further development a clear and predictable regulatory process.
- Primary regulatory interests include potential adverse impacts to protected marine mammals and turtles and potential conflicts with existing human activities (particularly commercial fishing).

CARBON SEQUESTRATION

- Carbon sequestration has been identified as an example of an emerging technology that may be proposed within the regional planning area in the future; no projects are currently proposed.
- The technology immediately relevant to the ocean plan is carbon capture and injection and storage under the seabed, which is regulated by the USEPA under section 103 of the Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act).
- At least one project involving sub-seafloor sequestration of carbon has been considered on the east coast of the US, in association with an electricity- generating

facility. The project was discontinued, but provides one example to draw from regarding potential planning considerations.[9]

- Key issues will include science and risk analyses associated with this new technology.
- Primary regulatory interests for seabed injection are expected to concern potential adverse impacts to seafloor habitat and existing human uses. A question that has not been resolved is which agency would serve as the lead agency for NEPA review.
- The ocean plan can support agency participation in the Blue Carbon project through efforts to characterize and enhance natural carbon sequestration services provided by saltmarshes and sea grasses in the region.

DISCUSSION OF OPTIONS AND POTENTIAL ACTIONS

The options and potential actions have been developed as opportunities to improve the effectiveness of decision making through existing processes, primarily NEPA and USACE permitting.

The potential actions presented process efficiencies based on the use of new data and information developed through the ocean planning process (data products include scientific and stakeholder review and discussion); advance the ability of agencies to use new knowledge to accomplish their missions; and enhance transparency and access to information and future decision making based on information developed through the public ocean planning process.

The discussion is organized to present the topic area, specific potential actions, context for the action, and products that could be developed to implement the action.

ENHANCE COORDINATION AND GUIDANCE

1. **Develop a best-practices template to inform pre-application consultation for NEPA review and permitting actions, that could include:**

[9] As described by ESS Group, the project consultant, the permitting issues associated with the proposed project (which entailed sea floor drilling and placement of an injection pipe to reach an existing sub-sea reservoir to contain the carbon dioxide) were relatively straight-forward under the Clean Water Act section 404 and Rivers and Harbors Act section 10. Both New York and New Jersey sought standing to review the project under the CZMA to ensure state review of potential impacts to resources and uses of their coastal waters if the system were compromised. Chris Rein, ESS Group, personal communication, August 4, 2014.

a. A general characterization of the planning and regulatory context, general description of key issues typically associated with particular types of development activities, and a description of the consultation process;
b. A list of agencies and tribes which have a jurisdictional or informational interest, and stakeholders which have a professional interest, in the type of proposed action;
c. Guidance to proponents about the kind of information and level of detail that can best support initial discussion (by project type, applicable authorities, and key data available through the data portal); and
d. Commitment by agencies to standardize the practice of pre-application consultations as a normal course of doing business.

Pre-application consultation is an informal information-gathering and consultation process between a project proponent and the regulatory agencies that occurs before formal regulatory action begins. The purpose of pre-application review is to help all parties understand the what, where, when, how, and why questions related to the proposed action. Additionally, pre-application consultations clarify applicable authorities and required information, identify potentially significant impacts to jurisdictional resources and existing human activities, identify what data is available and what is missing and needed, identify potentially affected stakeholders to be consulted, and provide an opportunity to modify the action in response to agency concerns.

Agencies expressed strong support for an enhanced and informed pre-application process constructed in part to take maximum advantage of the regional informational context that the ocean plan will provide. Additional key benefits identified by the agencies are that pre-application review educates proponents and agencies about the proposed activity, the physical environment in which it will occur, and the regulatory process by which the project will be reviewed; identifies potential issues early in the process; provides clear guidance to project proponents; and leads to more predictable project outcomes. Non-governmental representatives similarly supported an enhanced pre-application process that provides high-quality baseline data, access to agency and stakeholder expertise, and clear direction, but that allows for project-specific flexibility in how the process is managed. A key benefit of this option, identified by both agencies and marine industries, is the value of identifying potentially interested and/or affected agencies and stakeholders early in the review process.

The purpose of the pre-application template would be to help a project proponent bring a more informed proposal to the process, and to provide a level of consistency and predictability for proponents, stakeholders, and agencies. Such a template would not

result in additional formal obligations for the proponent or an agency, and the lead agency could tailor such a template to its own practices.

2. **For projects that require an Environmental Impact Statement (EIS), develop a memorandum that outlines mutual expectations and best practices for lead and cooperating agencies**

This option provides an opportunity to advance state and federal coordination in the conduct of NEPA EIS reviews. Agencies could develop a memorandum that reflects agreements about state and federal agency coordination, participation in public pre-application and scoping meetings, the early identification of review and approval requirements and their associated schedules, and other issues. To address agencies' potential concerns about the level and nature of their involvement in the review process due to time and resource constraints the agreement could be developed and employed in the manner of a pilot project for a particular category of ocean use.

3. **Develop guidance within the plan that describes how the practices that are developed in the plan (planning decisions that guide data use and agency coordination) could be used in NEPA review, Clean Water Act and Rivers and Harbors Act permitting, and regulatory consultations**

In developing the ocean plan, the RPB will make a number of decisions that will affect how the plan will be constructed, the data and information it will contain and how it can be used, and how the plan will be implemented through the operation of agencies' existing authorities. Federal agencies (perhaps with EPA support, in concert with its responsibility to review all agency Environmental Impact Statements) could develop guidance that reflects decisions made through the planning process about how, and with what level of authority, different kinds of data can be used or further developed to characterize resources and human activities under the NEPA and permitting review processes.10 Similarly, agencies with lead jurisdiction related to regulatory consultations could develop guidance that describes how those consultations will make use of plan data and information. Last, guidance could also clarify that where the ocean plan provides mechanisms to achieve more efficient decision making as described above (and below, under the CZMA), regulatory agencies will need to make their decisions based on the details of individual proposed activities and related new information. Thus, there could be guidance in the ocean plan that describes how plan elements (data and information and process elements) can be incorporated into specific

[10] These uses of data could relate to scoping alternatives analyses, describing the affected environment, identifying issues needing further evaluation and study (such as those high priority uses and resources that are likely affected), evaluating cumulative impacts, and mitigating project impacts.

decisions, accompanied by language stating that in any specific case a state, tribal, or federal agency may have additional data or process requirements, pursuant to existing authorities.

4. **Develop federal agency external guidance that describes how agencies will engage in ocean plan implementation**

5. **Develop memoranda that memorialize agreement among agencies, parallel to but based on existing authority and independent of the ocean plan, about practices that are developed in the plan**

External guidance for stakeholders and the public that describes how the individual agencies will implement the ocean plan is important to clarify the legal and practical relationship of the ocean plan to existing authorities and the National Ocean policy, and will provide transparency and predictability to the operation of the ocean plan. Because the planning process is based on consensus, the final plan will represent agency agreement about the information and procedures it contains, and agreement that, after the National Ocean Council concurs with the plan, federal agencies will comply with the ocean plan to the fullest extent consistent with applicable law, pursuant to Executive Order 13547.11

The ocean plan will reflect agency consensus about a new generation of data, information, and best practices. However, the authority to use and implement those materials, and the assurance that they will continue to be applied over time, rests in the transitory authority of the Executive Order. Developing memorandums of agreement or other materials that memorialize practices developed in the ocean plan but derived from existing statutory authority would provide predictability and greater assurance that the foundational benefits of the ocean plan will be carried forward over time.

6. **Frame principles to guide external discussions regarding allocation policy for regional sand and gravel resources**

The federal government, through BOEM, is investing significant resources to identify sand and gravel resources along the Atlantic coast, including the Northeast, as sources of material for beach nourishment and habitat restoration. The inventory of potential sand and gravel resources is the first step in developing information that will inform BOEM's Marine Mineral Program as it provides access to Outer Continental Shelf (OCS) mineral resources. BOEM is coordinating its actions with

[11] Executive Order 13547 -- Stewardship of the Ocean, Our Coasts, and the Great Lakes, Sec.6.(a)(ii).

stakeholders in the regions and states, and has established working partnerships with states to help frame and support the process at the state level. A key challenge will be developing policy that provides equitable access among the states to a national resource for which demand is likely to exceed supply in some regions. The informational context of the planning process provides an opportunity to help frame a regional perspective that could help guide regional or state policy making, perhaps through the Northeast Regional Ocean Council.

7. **Establish a regional interagency group to address management issues and develop pre-application, siting, and regulatory guidance for deep water aquaculture of unmanaged species**

Deep water aquaculture is an emerging activity in the Northeast state waters, and there is significant interest in developing the activity in federal waters. Two projects have been proposed in federal waters off the coast of Massachusetts, one of which has been permitted, that would grow blue mussels on lines suspended vertically in water column. The planning team's discussions with managers, regulators, and members of the industry have therefore focused on deep water, long line shellfish aquaculture, which illustrates four issues common to all types of deep water aquaculture: 1) the need for access to ocean space that is large enough to achieve an economically viable scale of operation; 2) the need to avoid conflicts with existing human activities (particularly commercial fishing) and protected resources (such as marine mammals and turtles; 3) the current lack of legal mechanism to give a developer a lease or other legal interest to address site control-related matters; and 4) the need to address these issues in clear and predictable regulatory processes.

At a general level, areas suitable for long line aquaculture can be readily delineated by the operational requirements of the technology and the environmental and site characteristics necessary for successful animal or plant growth, including areas that lie within the depth range needed to provide sufficient clearance from and proximity to the seabed, appropriate hydrodynamics, accessibility from a shore-side facility, and other factors. These areas can then be screened using existing spatial data and professional knowledge for potential conflicts with existing uses and natural resources, including marine mammals and turtles. It is more challenging for regulators to approve the specific location and operation of these facilities because existing data may not adequately represent resources at a project-specific scale, and there is scant experience evaluating the ability to mitigate potential impacts to species of concern.

- An interagency working group comprised of the USACE, NMFS, BOEM, U.S. Coast Guard, and others as appropriate could be established to develop clear regulatory guidance for siting and permitting unmanaged species. Lessons learned from the two ongoing deep water aquaculture pilot projects, led by the Woods Hole Oceanographic Institute and Salem State College, respectively, could inform the interagency work.

USE OCEAN PLAN DATA TO INFORM REVIEW AND PERMITTING

1. **Develop select data products (related to natural resources and human activities) that represent best available science; develop baseline reference data for use in NEPA and regulatory documents.**

Data and information that have been developed with stakeholder input and determined through agency review to accurately represent a component of the marine ecosystem or a particular human activity provide significant informational and procedural benefits to agencies, proponents, and the public. Documents that agencies determine are scientifically valid and compile all known relevant data and information about a component of the marine ecosystem or human activity have similar value. In both of these cases, once the material has been developed, the subject matter can be incorporated by reference or otherwise used as needed in any subsequent management, NEPA, or regulatory action.

Agencies could collaborate through the planning process to identify data that are feasible to characterize as representing best available science, and can be incorporated into the Northeast ocean data portal. These data could include distribution and abundance maps, 'hot spot' maps, or other representations of natural resources and human activities. Data under development for the ocean plan that may be appropriate for consideration include:

- Navigation
- Commercial Fishing
- Recreation
- Marine mammals
- Fish and shellfish
- Turtles
- Birds
- Coastal wetlands
- Sea grasses

In addition the ocean plan could develop key baseline reference data that could be consistently used in subsequent NEPA review and regulatory consultations for all types of activities. These include but are not limited to:

- Environmental, economic, and human use characterizations
- Endangered Species Act (ESA) flora and fauna

- Descriptions of life histories and other habitat information for special status species

In addition, agencies could agree to use data representing best available science, and baseline reference data, as the applicable regional standard for project review and permitting purposes. Once developed and incorporated in the ocean plan, these sources of authoritative information would provide consistent and predicable information to support each of the three overarching goals for the ocean plan.

2. Identify opportunities for agencies to develop materials that support consultations for EFH, ESA, MMPA, and the NHPA

Federal agencies undertaking or authorizing actions that may affect essential fish habitat, endangered species, marine mammals, protected birds, and cultural and historic resources are required to consult with the agencies with jurisdiction over those resources. These consultations are nested within and make use of NEPA review and permitting processes to identify and develop the information and analyses required to evaluate the potential impacts of the proposed action. For example, NMFS is currently involved in developing a programmatic approach to consultation with the Federal Highways Administration to evaluate process, develop technical impact assessment guidance, and consider programmatic consultations. In addition to project-specific evaluations, consultations may be developed programmatically to apply to a class of activity that is likely to be repeated over time within a discrete geography. Depending on the scope and size of the activity, these programmatic consultations can be an efficient up-front investment of agency time, but they require access to data and information relevant to the resources of interest at a sufficient level of detail to allow the resource agency to determine potential impacts. The greater the importance or vulnerability of the resource or the more significant the potential impacts, the more data and information is needed. In addition, agency experience with the type of activity in the Northeast region is an important factor, as best professional judgment is a component of decision making. Based on discussions with federal agencies, uses that have potentially significant impacts to resources for which data is lacking (such as sand and gravel extraction and habitat data), and for which the technology (and thus potential for impacts) is not defined (carbon sequestration) may not be good initial candidates for consideration of developing programmatic consultations.

Agencies could review opportunities and constraints associated with developing products that provide baseline, region- or sub region-wide resource characterizations, and identify specific products to develop in parallel with the planning process. Potential actions identified by the agencies include:

- Consider programmatic approaches for ESA and EFH for specific phases of wind energy leasing/review process;
- Consider programmatic approaches for ESA and EFH for sand and gravel extraction, building on NMFS and BOEM work in the Mid Atlantic, South Atlantic, and Gulf of Mexico. In the absence of high resolution benthic habitat data to support analysis of the impacts of sand and gravel extraction, develop data to represent: geological setting, sediment type, sediment source, geologic feature identification and range;
- Consider programmatic approaches for ESA and EFH for particular deep water aquaculture species (blue mussels); and
- Develop approach to mapping NHPA resources as basis for developing a programmatic consultation

3. **Use plan-developed data and information for a compatibility analysis of the four uses to support USACE public interest review**

A compatibility analysis is an assessment of whether and how an activity impacts natural resources and existing human activities. It can be developed at varying levels of detail, and provide valuable information about the interaction among and between activities and resources that can be used to inform planning, environmental review, and the permitting process. Compatibility analyses can range from reference documents that describe and catalogue potential interactions with other resources and activities, to the spatial representation of areas that are more suitable or less suitable for specific activities based on potential interactions and impacts associated with natural resources and existing activities.

For permitting, a compatibility analysis can serve as a tool to help the USACE conduct the required public interest review, by which it evaluates whether a proposed activity, after considering a range of environmental, social, economic, cultural and other factors, is in the public interest. To guide development of a regional compatibility analysis:

- Agencies could scope the need for, and the level of detail and content of, a compatibility analysis. One of several considerations would be an assessment of the ability to quantify impacts associated with emerging uses such as wind and hydrokinetic energy.

4. **Develop guidance within the plan for the analysis of cumulative multi-sector impacts at a regional scale, with focus on migratory species**

Agencies identified the assessment of cumulative impacts generally, and as they relate to migratory species as a particular example, as an issue that the plan could advance. The assessment of cumulative impacts – the combined, incremental effects of human

activities – is required under NEPA and other statutes. NEPA and related guidance developed by individual agencies provide extensive criteria and guidance on the assessment of cumulative impacts. Generally, the permitting process addresses the impacts of an individual action in a specific area. A cumulative impact assessment, by contrast, addresses "the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource…."[12]

While there was agreement that the ocean plan could advance the agencies' ability to assess cumulative impacts, different agencies had different perspectives about the most effective way to do so. Different recommendations included:

- Develop a consistent methodology for use of plan data and agency guidance to support consistent analysis;

- Recognize that individual approaches may be better suited for specific circumstances and focus on clarifying and/or coordinating existing agency guidance and organizing the data to support future individual agency assessments;
- Use plan data to assess the regional cumulative impacts of particular actions, such as the impacts of a structure on seafloor habitat or a migratory pathway; and
- Use plan data to assess the regional cumulative impacts of categories of infrastructure, such as wind energy, sand and gravel extraction, and/or deep water aquaculture.

5. Incorporate reference to the data portal in New England Programmatic General Permit and other regulatory guidance materials

As demonstrated by recent projects in the region, the availability of high quality data for resources and human activities enhances the proponent's ability to present a project that avoids areas or activities of importance or incompatibility, and provides a common baseline of information that all interested parties can work from. Through the ocean planning process, agencies will be coming to agreement about how data can best represent resources and human activities for particular management purposes. The PGP and other agency guidance materials, such as BOEM's survey guidelines specific to offshore wind development, provide an opportunity to maximize the use of ocean plan data and information.

[12] *Consideration Of Cumulative Impacts In EPA Review of NEPA Documents,* U.S. Environmental Protection Agency, Office of Federal Activities (2252A), EPA 315-R-99-002/May 1999

- The forthcoming PGP and other relevant external federal and state agency guidance materials could cite the ocean plan and data portal as an informational resource.

SUPPORT STATE AND FEDERAL OCEAN MANAGEMENT OBJECTIVES UNDER THE CZMA

1. Coordinate ocean plan data and guidance development with state ocean plans or interests

All states in the Northeast region manage their ocean space with state ocean plans and/or state coastal management programs developed under the CZMA. Through their coastal management programs, each state in the region has coastal policies that address its management interests, and that apply to actions of the federal government in, and in some instances outside of, state waters. States with ocean management plans have developed additional data and information that includes management requirements that are incorporated as enforceable policies in their coastal management programs. States will look to ensure that practices developed under the regional ocean plan are not inconsistent with those already in place at the state level. This includes both planning decisions that may have the implicit effect of new policy regarding management of human activities or natural resources, or at a finer scale, how data are developed to represent these features and how they interrelate with those data already employed by the states.

- Agencies could Identify key data and planning decisions that would benefit from specific coordination with state ocean plan materials or policy interests

2. Evaluate the opportunity to support regionally or sub-regionally consistent 'geographic location descriptions' for specific activities

Under approved state coastal programs, states have the authority under the CZMA to review for consistency with state policy federal actions that may affect the uses or resources of a state's coastal waters, among which include actions proposed by the federal agencies themselves (such as USACE dredging project) and actions that require federal permits or licenses (such as an aquaculture project). One way that states can formally exert jurisdiction is to define specific areas outside state waters in which it has been determined that a specific kind of activity will have an effect on uses or resources in state waters (requires approval by NOAA/OCRM). Some states in the Northeast have established these areas for certain uses, which, while effective in advancing state management interests, can create a geographic management patchwork. The ocean plan

provides an opportunity to consider whether or how the interests behind the establishment of those areas can be addressed consistently across regional waters.

3. **Develop regionally consistent categories of federal agency actions that can be addressed by general consistency or comparable provisions under the CZMA**

Because federal agency activities and federal license or permit activities are diverse in scope, scale, and potential level of significance, NOAA's CZMA regulations provide for a number of ways that federal agencies can submit those activities for state review that correlate the significance of the potential impacts of the activity with the level of effort associated with the development of the review material and state's review. "General consistency provisions," for example, are similar to programmatic consultations, and can achieve the same kinds of efficiencies: one initial review of a category or class of activity can be used to address all future activities within the category. This provides flexibility and efficiency for both the federal agency and the state conducting the review, both of which can ensure that their interests are addressed through the minimum necessary level of effort, and for private project applicants, who may not be required to submit an application.

The ocean plan provides an opportunity to identify federal agency activities and federal license and permit activities to determine whether data and information developed in the plan can support use of general consistency or other provisions in NOAA's CZMA regulations to provide administrative efficiencies and predictability across the region. Components of BOEM's marine mineral and renewable energy leasing programs and U.S. Navy training exercises and U.S. Coast Guard buffer zones are examples of potential candidates for general consistency. For federal license or permit activities, the states could apply "de minimus" or "general consistency provisions" to categories of activities related to the four uses, such as the Rhode Island coastal program's designation of meteorological data towers located outside specific fishing areas as an activity exempt from formal federal consistency review.

ADDITIONAL INFORMATION

ENERGY INFRASTRUCTURE

- BOEM Offshore Wind Energy Program
- BOEM Renewable Energy Program Regulations (30 CFR 585)
- BOEM Guidance Documents
    - Guidelines for BOEM Renewable Energy Framework
    - Guidelines on Regulation of Marine and Hydrokinetic Energy Projects on the OCS
    - Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plans (COP)
    - Guidelines for Submission of Spatial Data for Atlantic Offshore Renewable Energy Development Site Characterization Surveys.
    - Guidelines for Providing Avian Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585.
    - Guidelines for Providing Geological and Geophysical, Hazards, and Archaeological Information.
    - Guidelines for Providing Fisheries Survey Information (Atlantic OCS).
    - Guidelines for Providing Benthic Habitat (Atlantic OCS).
    - Guidelines for Providing Marine Mammal and Sea Turtle Survey Information (Atlantic OCS).

SAND AND GRAVEL EXTRACTION

- BOEM Marine Minerals Program
- Procedures for Pursuing a Negotiated Agreement For the Use of Sand and Gravel Resources on the Outer Continental Shelf

DEEPWATER AQUACULTURE

- NOAA Office of Aquaculture
- NOAA Aquaculture Policy

REGULATORY AUTHORITIES

- National Environmental Policy Act: Regulations
- Essential Fish Habitat: Regulations
- Endangered Species Act: Regulations
- Migratory Bird Treaty Act: Regulations
- National Historic Preservation Act: Regulations
- Coastal Zone Management Act: Regulations

State Federal Consistency Lists identifying Federal Agency, Federal License or permit, and federal financial assistance activities subject to federal consistency review.					
Maine	New Hampshire (pg 4)	Massachusetts	Rhode Island	Connecticut	New York

State Enforceable Policies	
ME	Maine's core laws, representing many but not all of the federally approved enforceable policies, are listed in their federal consistency guide *See page 10 of consistency guide applicable state laws.
NH	New Hampshire's enforceable policies are listed in their federal consistency guide. *See Chapter 3 of *NH's Coastal Program Final EIS* (July 1998) for applicable state laws
MA	Massachusetts enforceable policies are listed in the MA CZM's policy guide. *See appendix 3 of policy guide for applicable state laws.
RI	Rhode Island's enforceable policies are aggregated in their Special Area Management Plan and Coastal Resources Management Program, a.k.a. the "Red Book"
CT	Connecticut's enforceable polices exist in a stand-alone document; (Reference Guide to Coastal Policies and Definitions) *Applicable state laws referenced underneath enforceable policies
NY	NY enforceable polices exist in a stand-alone document; (State Coastal Policies) *Applicable State laws referenced in Part II, Section 6 of NY CMP & Final FEIS

AGENCIES AND REGULATORY PROFESSIONALS CONSULTED

Potential options to support effective decision making are based on information developed over the course of meetings with federal and state agencies and regulatory professionals from marine industry and public interest organizations. This is a preliminary list as of August 13, 2014.

FEDERAL AGENCIES

- U.S. Army Corps of Engineers New England District
- National Oceanic and Atmospheric Administration/Office of Ocean and Coastal Resource Management
- National Oceanic and Atmospheric Administration/NOAA Fisheries Greater Atlantic Regional Fisheries Office
    - Protected Resources Division
    - Habitat Conservation Division
    - Office of Aquaculture

- U.S. Environmental Protection Agency Region 1
- U.S. Department of Energy Office of Energy Efficiency & Renewable Energy
- U.S. Coast Guard First District
- U.S. Department of Interior/Bureau of Ocean Energy Management:
    - Office of the Deputy Director
    - Renewable Energy Program
    - Minerals Management Program

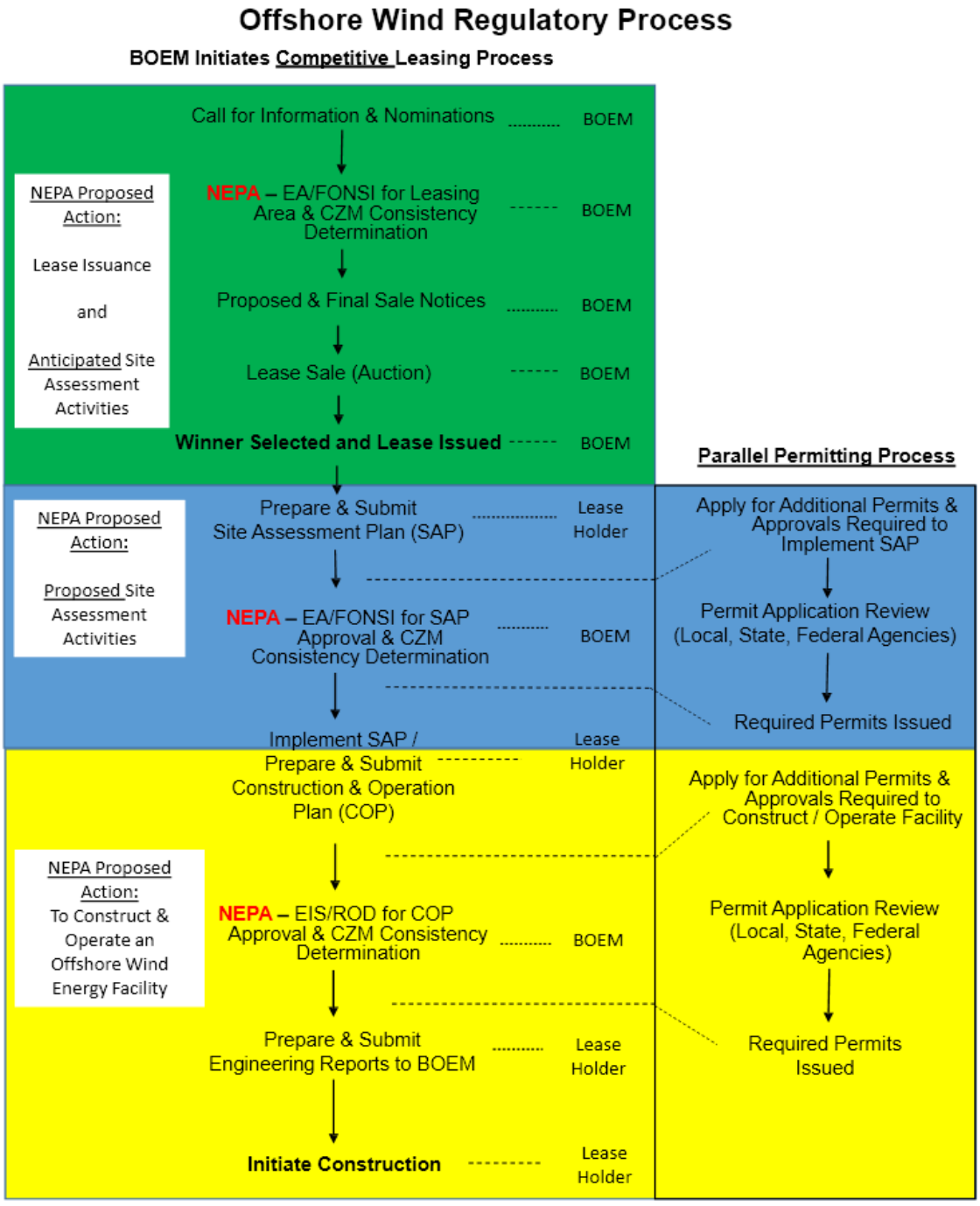
STATES AGENCIES

- Maine Coastal Program and Department of Marine Resources
- New Hampshire Coastal Program and Department of Environmental Services
- Massachusetts Office of Coastal Zone Management
- Rhode Island Coastal Resources Management Council
- Connecticut Coastal Management Program
- New York Coastal Management Program and Department of State

MARINE INDUSTRY AND PUBLIC INTEREST ORGANIZATIONS

- Deep Water Wind
- American Mussel Harvesters, Inc.
- East Coast Shellfish Growers Association
- Mintz Levin Cohn Ferris Glovsky and Popeo PC
- Durand & Anastas Environmental Strategies
- Conservation Law Foundation
- Natural Resources Defense Council
- Environmental Business Council of New England:

    - Tetra Tech
    - Normandeau Associates, Inc.
    - Epsilon Associates, Inc.
    - TRC
    - Woods Hole Group, Inc.
    - AIG
    - Alpha Analytical
    - CDW Consultants, Inc.
    - GZA GeoEnvironmental, Inc.
    - HRA Gray & Pape
    - Cape Cod Community College
    - National Grid
    - Grasso Associates
    - Cronin Management


Offshore Wind Regulatory Process
BOEM Initiates Competitive Leasing Process
Call for Information & Nominations ..... BOEM
NEPA Proposed Action:
Lease Issuance
and
Anticipated Site Assessment Activities
NEPA – EA/FONSI for Leasing Area & CZM Consistency Determination ------ BOEM
Proposed & Final Sale Notices ..... BOEM
Lease Sale (Auction) ------ BOEM
Winner Selected and Lease Issued ------ BOEM
Parallel Permitting Process
NEPA Proposed Action:
Proposed Site Assessment Activities
Prepare & Submit Site Assessment Plan (SAP) ..... Lease Holder
Apply for Additional Permits & Approvals Required to Implement SAP
NEPA – EA/FONSI for SAP Approval & CZM Consistency Determination ..... BOEM
Permit Application Review (Local, State, Federal Agencies)
Implement SAP / Prepare & Submit Construction & Operation Plan (COP) ---------- Lease Holder
Required Permits Issued
NEPA Proposed Action:
To Construct & Operate an Offshore Wind Energy Facility
Apply for Additional Permits & Approvals Required to Construct / Operate Facility
NEPA – EIS/ROD for COP Approval & CZM Consistency Determination ..... BOEM
Permit Application Review (Local, State, Federal Agencies)
Prepare & Submit Engineering Reports to BOEM ..... Lease Holder
Required Permits Issued
Initiate Construction --------- Lease Holder

ACRONYMS

BOEM	Bureau of Ocean Energy Management
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Report
ESA	Endangered Species Act
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
OCRM	Office of Ocean and Coastal Resource Management
OCSLA	Outer Continental Shelf Lands Act
PGP	New England Programmatic General Permit
RPB	Northeast Regional Planning Body
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service