



March 31, 2021

The Problems and Opportunities of Offshore Wind

By Cole Jermyn (JD 2021)

Offshore wind farms are coming to the US. After decades of NIMBYism and a lethargic regulatory process, there are now two pilot projects in US waters and commercial-scale development on the way. Most projects are planned far enough offshore that they are beyond the viewshed of coastal landowners, decreasing coastal community opposition like that which doomed the Cape Wind project. Today, the strongest opposition to offshore wind development comes from fishermen. Commercial fishermen have been working off the US coast for longer than the country has existed,¹ and particularly in the Northeast—where offshore wind is closest to commercial development—fishermen have faced little in the way of offshore development that would conflict with their work.² But this is quickly changing, as Bureau of Ocean Energy Management (BOEM) has seventeen currently active commercial leases for offshore wind projects off the coasts of eight states.³

Fishermen have expressed multiple concerns about offshore wind farms. Their objections include concerns that turbine spacing can make it difficult to fish in wind farm areas, displacing them from historical fishing grounds and potentially forcing them into conflict with other fishermen.⁴ Fishermen have also expressed concerns about piloting through wind farms, especially at times of low visibility. They have said this could lead them to instead travel around wind farms while heading to and from

¹ MARK KURLANSKY, *COD* 29 (1997) (discussing Basque fishermen catching cod in North American waters at least as early as the 14th century).

² This is in contrast to the Gulf of Mexico, where oil and gas extraction has driven offshore development for over 80 years. BOEM, *THE OFFSHORE PETROLEUM INDUSTRY IN THE GULF OF MEXICO: A CONTINUUM OF ACTIVITIES* 6, <https://www.boem.gov/sites/default/files/boem-education/BOEM-Education-Images-and-Resources/TheOffshorePetroleumIndustryOrganizationalScheme.pdf>.

³ BOEM, *OUTER CONTINENTAL SHELF RENEWABLE ENERGY MAP BOOK* (March 2021), https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Renewable_Energy_Leases_Map_Book_March_2021.pdf.

⁴ See Benjamin Storrow, *Offshore wind companies team up to appease fishing industry*, E&E News (Nov. 19, 2019), <https://www.eenews.net/climatewire/stories/1061587067>.



fishing grounds, increasing fuel costs and decreasing time for fishing.⁵ With the thin margins fishermen operate on, these inconveniences may be enough to sink their business.

This conflict can easily be framed as a David-and-Goliath struggle between the small, independent fishermen and the large corporations taking over what has long been theirs. But the benefits of offshore wind aren't just profits for the developers. A 2016 report from the Department of Energy found that under an aggressive development scenario, offshore wind could provide 14% of the electricity consumed in the US by 2050.⁶ This would mean a 1.8% reduction in national greenhouse gas emissions, and \$2 billion in avoided healthcare costs and economic losses from decreases in ambient nitrogen oxides, sulfur dioxide, and particulate matter.⁷ Offshore wind development, therefore, could play a significant role in achieving carbon neutrality in the US while also improving public health and offering jobs to replace those lost in the fossil fuel industry. But reaching these goals means overcoming the hardened opposition of the fishing industry.

This paper looks at how improved collaborative governance efforts by BOEM could help the agency and developers to overcome fishing industry opposition to offshore wind projects and accelerate long-term development of wind farms. Part I looks at the Massachusetts Wind Energy Area (WEA), where the first commercial offshore wind farm in the US is likely to be built, as a case study in how BOEM and wind developers have consulted with fishermen during the offshore wind leasing and development process. Part II looks at existing collaboration and consultation efforts for offshore wind within BOEM and at the state level that could inform an improved process. And Part III makes recommendations for what BOEM can do, with support from Congress, to make offshore wind siting and development a truly collaborative process.

⁵ See Meg Dalton, *In Northeast, more research needed on offshore wind's impact on fishing*, ENERGY NEWS NETWORK (Apr. 17, 2019), <https://energynews.us/2019/04/17/in-northeast-more-research-needed-on-offshore-winds-impact-on-fishing/> (Quoting Responsible Offshore Development Alliance executive director Annie Hawkins as saying "If it takes you 6 hours to navigate around development areas, it's 6 hours you don't have to fish.")

⁶ PATRICK GILMAN ET AL., U.S. DEP'T OF ENERGY, FRED BECK, U.S. DEP'T OF THE INTERIOR, NATIONAL OFFSHORE WIND STRATEGY, at viii (2016).

⁷ *Id.*



I. The Massachusetts Wind Energy Area Case Study

In November of 2010, then-Secretary of the Interior Ken Salazar announced the “Smart from the Start” initiative with the goal of minimizing conflicts and accelerating the permitting process for offshore wind projects.⁸ The initiative included multiple parts, including regulatory changes to speed the leasing process when there was only one developer interested in a lease, and the new process of identifying Wind Energy Areas.⁹ WEAs were intended to be the areas “most suitable for wind energy development,” within which BOEM could offer multiple leases in a more efficient manner as each WEA would be selected to avoid the most serious conflicting uses.¹⁰

The Massachusetts WEA, one of the first areas to go through this revised leasing process and the closest to actual development today, provides an example of how the process has worked in practice.

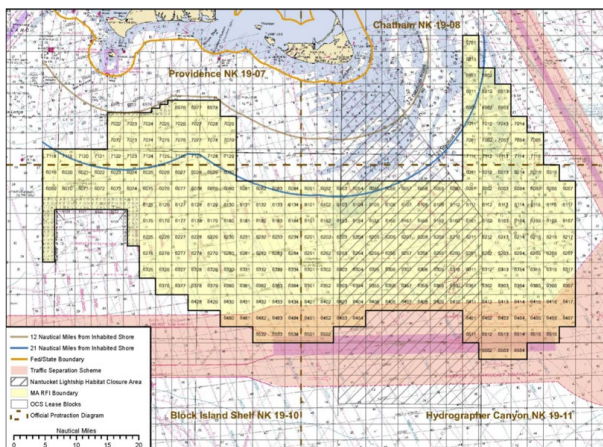


Figure 1 BUREAU OCEAN ENERGY MGMT., Massachusetts Renewable Energy Task Force Webinar (May 15, 2013), <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MA-Task-Force-Meeting-Presentation-051513.pdf>.

BOEM began by issuing a Request for Information (RFI) for a potential WEA for about 2,600 square miles of federal waters south of Cape Cod, Nantucket, and Martha’s Vineyard, seen here in Figure 1, on December 29, 2010.¹¹

BOEM accepted public comments on the RFI until April 18, 2011, and received 11 expressions of interest from potential offshore wind developers and 246 public comments from individuals, businesses and industry groups, non-profits, and state

⁸ Press Release, U.S. Dep’t Interior, Salazar Launches ‘Smart from the Start’ Initiative to Speed Offshore Wind Energy Development off the Atlantic Coast (Nov. 23, 2010), <https://www.doi.gov/news/pressreleases/Salazar-Launches-Smart-from-the-Start-Initiative-to-Speed-Offshore-Wind-Energy-Development-off-the-Atlantic-Coast>.

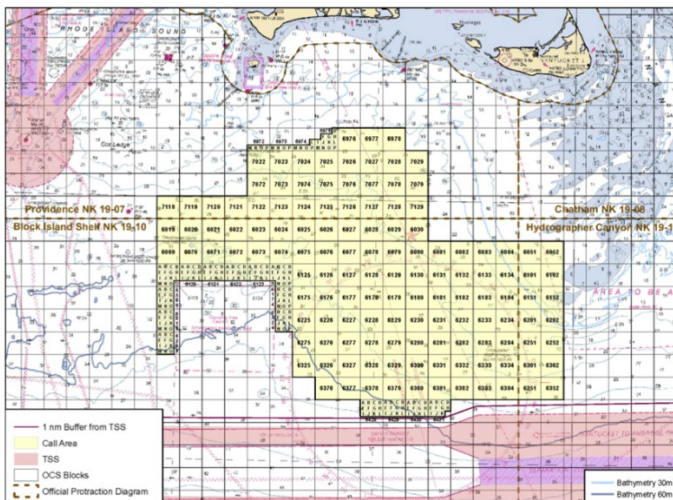
⁹ *Id.*

¹⁰ *Id.*

¹¹ Massachusetts Leases OCS-A 0500 (Bay State Wind) And OCS-A 0501 (Vineyard Wind), BOEM, <https://www.boem.gov/renewable-energy/state-activities/massachusetts-leases-ocs-0500-bay-state-wind-and-ocs-0501>.



and federal agencies.¹² Comments that specifically addressed concerns over commercial fishing came from one vessel owner, multiple commercial fishing industry groups, multiple environmental non-profits, the state of Massachusetts, the mayor of New Bedford, the New England Fishery Management Council, and the National Marine Fisheries Service.¹³ BOEM responded to comments from the American Alliance of Fishermen, the mayor of New Bedford, and the state of Massachusetts asking that BOEM remove the portion of the RFI area east of 70° longitude from consideration for leasing by excluding this section from the WEA.¹⁴ The remaining area looked as follows (Figure 2):



This area, now known as the call area, was subject to another round of requests for interest public comments beginning on February 6, 2012, and ending on March 22, 2012.¹⁵ BOEM received 10 expressions of interest from developers and 32 public comments.¹⁶ BOEM responded to these comments by removing an additional 140 square miles from the final WEA that were areas of high sea

Figure 2 BUREAU OCEAN ENERGY MGMT., Massachusetts Renewable Energy Task Force Webinar (May 15, 2013), <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MA-Task-Force-Meeting-Presentation-051513.pdf>.

¹² Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts-Call for Information and Nominations, 77 FR 5820, 5825 (Feb. 6, 2012).

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Massachusetts Leases OCS-A 0500 (Bay State Wind) And OCS-A 0501 (Vineyard Wind)*, BOEM, <https://www.boem.gov/renewable-energy/state-activities/massachusetts-leases-ocs-0500-bay-state-wind-and-ocs-0501>.

¹⁶ *Id.*



duck concentration or of particularly valuable fisheries.¹⁷ The final WEA is seen in Figure 3.

This WEA, along with an adjacent WEA to the Northwest, was then eligible for leasing through a competitive auction. The auction for two of these leases, including that ultimately won by Vineyard Wind was held on January 29, 2015.¹⁸ Vineyard Wind submitted its Site Assessment Plan (SAP) in March of 2017, which was eventually approved by BOEM in May of 2018. The company also submitted its Construction and Operations Plan (COP) in December of 2017, which has still not received final approval due to delays in the NEPA review of the project.¹⁹

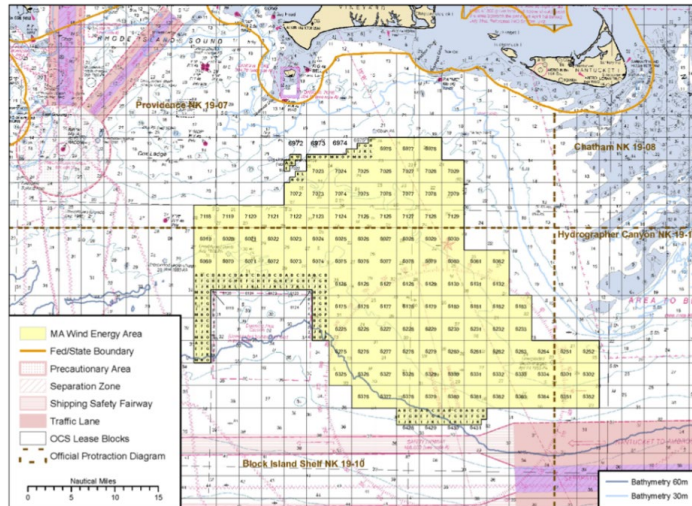


Figure 3 BUREAU OCEAN ENERGY MGMT., Massachusetts Renewable Energy Task Force Webinar (May 15, 2013), <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/MA-Task-Force-Meeting-Presentation-051513.pdf>.

¹⁷ *Id.*

¹⁸ *Massachusetts Leases OCS-A 0500 (Bay State Wind) And OCS-A 0501 (Vineyard Wind)*, BOEM, <https://www.boem.gov/renewable-energy/state-activities/massachusetts-leases-ocs-0500-bay-state-wind-and-ocs-0501>.

¹⁹ The finalized Environmental Impact Statement for the project was released in March 2020, with approval of the COP expected to come later this year. Heather Richards, *Biden admin advances major offshore wind farm*, E&E News (Mar. 8, 2021), <https://www.eenews.net/greenwire/stories/1063726903/search?keyword=vineyard+wind>.

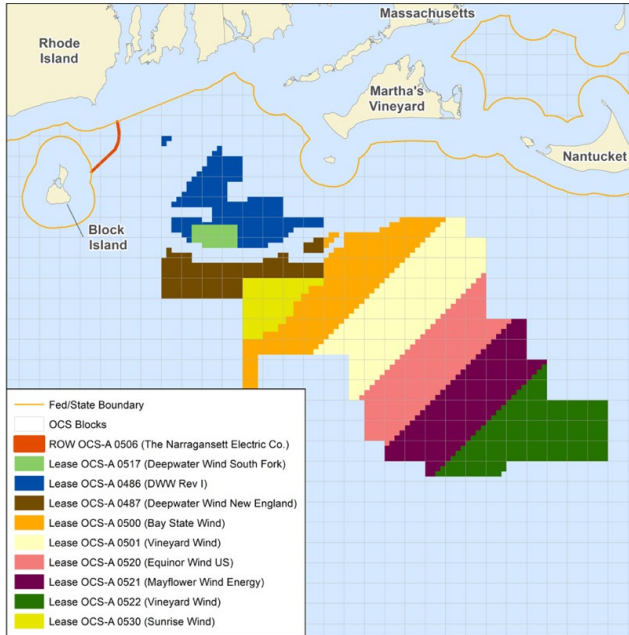


Figure 4 Massachusetts Activities, BOEM, <https://www.boem.gov/renewable-energy/state-activities/massachusetts-activities>.

Vineyard Winds’ journey through the permitting process has been challenging. The company had to negotiate with the state of Rhode Island, which used the Coastal Zone Management Act (CZMA) to engage with the process, faced concerns from fishing groups and other federal agencies even after agreeing to a fisherman compensation fund, and went through multiple rounds of revisions to its plans to address technological developments and in response to sometimes contradictory concerns of distinct groups of commercial fishermen. These experiences offer lessons for how collaborative governance approaches could minimize delays in future projects.

A. Rhode Island’s Special Area Management Plan

In 2007, the Office of Energy Resources for the State of Rhode Island determined that the state would need to increase investment in, and planning for, offshore wind farms if the state was going to achieve then-Governor Donald Carcieri’s goal of sourcing 15% of the state’s energy from offshore wind by 2020.²⁰ The state’s Coastal Resources Management Council (CRMC) proposed creating an Ocean Special Area Management Plan (OSAMP) that would focus the state’s regulation of the waters

²⁰ COASTAL RES. MGMT. COUNCIL, RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN ES2 (2010), https://seagrant.gso.uri.edu/oceansamp/pdf/samp_crmc_revised/RI_Ocean_SAMP.pdf. The Coastal Zone Management Act of 1972 provided federal incentives for states to establish councils such as the CRMC, and specifically recognized SAMPs as “a comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed and comprehensive statement of policies; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone.” 16 U.S.C. §1453(17).



off its coast with an eye towards offshore wind development, while also proactively engaging the public in this planning process.²¹ The OSAMP was completed by the CRMC in 2010 and saw minor edits in 2012 and 2013 before being codified in the Rhode Island Code of Regulations in 2016.²²

By creating the OSAMP, Rhode Island had triggered its authority under the CZMA to regulate certain activities by private parties that would impact its coastal zone. The law requires any applicant for a federal permit for an activity that would affect “any land or water use or natural resource of the coastal zone” to obtain approval from the affected state that the activity is consistent with the state’s management plan, a process known as a “consistency determination.”²³ After Vineyard Wind submitted its COP to BOEM in December of 2017, Rhode Island asked to review the company’s certification that the proposed wind farm was consistent with the OSAMP.²⁴ In February of 2019, the state and Vineyard Wind reached an agreement—the state would approve Vineyard Wind’s consistency certification in exchange for the company establishing a \$16.7 million fund to compensate Rhode Island fishermen for losses associated with construction of the wind farm.²⁵ Rhode Island fishermen, who believed this agreement failed to fully replace their expected losses from the project, looked to the National Oceanographic and Atmospheric Administration (NOAA) Fisheries office for help. NOAA Fisheries’ decision not to sign onto the draft Environmental Impact Statement (DEIS) for Vineyard Wind’s COP likely contributed to the decision by then-Secretary of the Interior David Bernhardt to pause the Vineyard Wind permitting process to complete a supplemental EIS.²⁶

²¹ *Id.*

²² *Ocean SAMP*, CRMC, http://www.crmc.ri.gov/samp_ocean.html.

²³ 16 U.S.C. §1456(c)(3)(A).

²⁴ *Agreement Regarding the Establishment and Funding of the Rhode Island Fishermen’s Future Viability Trust* (2019), http://www.crmc.ri.gov/windenergy/vineyardwind/Agreement_RIFFVT.pdf

²⁵ Benjamin Storrow, *Gina Raimondo nomination rekindles fish vs. turbine fight*, E&E News (Feb. 12, 2021), <https://www.eenews.net/climatewire/stories/1063725041>.

²⁶ Benjamin Storrow, *Emails show bond between NOAA, fishermen against project*, E&E News (Oct. 25, 2019), <https://www.eenews.net/climatewire/stories/1061368297>.



B. Vineyard Wind's Shifting Orientation and Spacing

As part of their original COP submitted to BOEM in December of 2017, Vineyard Wind proposed installing between 80 and 100 turbines spaced between 0.75 and 1 nautical mile apart.²⁷ The turbines would be orientated in rows northwest to southeast in an effort to minimize disturbances for scallop fishermen out of New Bedford heading further offshore to their fishing grounds.²⁸ This orientation, however, was opposed by multiple other groups of fishermen, including the squid fishermen from Rhode Island that opposed the CRMC's consistency determination for the project.²⁹ In November of 2019, 2 years after submitting their COP, and 9 months after reaching their compensation agreement with Rhode Island's CRMC, Vineyard Wind reversed course and announced that, along with the four other leaseholders in the Massachusetts WEA, it would orient its turbines east-west with a minimum 1 nautical mile spacing.³⁰

Vineyard Wind made another change in December of 2020, announcing it would temporarily withdraw its permit application in order to update its proposal to use GE's Haliade-X turbine, a 13-MW turbine that would allow the company to reach its target capacity of 800 MW with only 62 turbines, rather than the 80 to 100 considered in the DEIS.³¹ BOEM responded by saying it was terminating the company's permit application and it would need to begin the process again,³² but the Biden Administration quickly reversed this decision, stating that the permitting process would continue from where it left off.³³ The CEO of Vineyard Wind said he expects to complete the permitting process by late-2021, with the goal of having turbines installed and operating by 2023. The Department of the Interior announced BOEM had completed its review of the project on March 8,

²⁷ BUREAU OF OCEAN ENERGY MANAGEMENT, VINEYARD WIND OFFSHORE WIND ENERGY PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT 2-3 (2018), https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Vineyard-Wind/Vineyard_Wind_Draft_EIS.pdf [hereinafter DEIS].

²⁸ See Storrow, *supra* note 4.

²⁹ *Id.*

³⁰ *Id.* This orientation and spacing was considered as part of the DEIS and was found to have environmental impacts broadly similar to that of the original proposal. See DEIS, *supra* note 27, at ES-5-ES-8.

³¹ Benjamin Storrow, *Offshore wind CEO denies claims he's biding time for Biden*, E&E NEWS (Dec. 14, 2020), <https://www.eenews.net/climatewire/stories/1063720593/>.

³² Heather Richards and Michael Doyle, *In reversal, Interior solicitor bolsters fishermen over wind*, E&E NEWS (Dec. 15, 2020), <https://www.eenews.net/greenwire/stories/1063720751>.

³³ Heather Richards, *Biden admin will resume Vineyard Wind permitting*, E&E NEWS (Feb. 3, 2021), <https://www.eenews.net/eenewspm/stories/1063724297>.



2021, and published the final environmental impact statement (FEIS) on March 12, 2021.³⁴ Now that the environmental review process is complete, BOEM is working on finalizing its record of decision.

C. Stakeholder Negotiations in the Vineyard Wind Permitting Process

The history of the Vineyard wind project outlined above shows three negotiation/regulatory processes happening simultaneously: (1) federal permitting, (2) state-level consistency determination, and (3) agreements with other offshore wind developers and conflicting users. This system leads to a situation where offshore wind developers must pursue agreements with multiples parties at the same time, and concessions necessary to reach one agreement may introduce new problems in another.

We've seen multiple examples of such competing interests in separate negotiations hindering project development in the Vineyard Wind project. The northwest-southeast orientation proposal to appease scallop fishermen made reaching a compensation proposal with Rhode Island squid fishermen more difficult and likely triggered the dominos that led to a 1-year delay for a supplemental EIS. Negotiating with Rhode Island about a fishing community compensation fund without understanding the extent to which it was supported, or, in this case, not supported, by the fishing community contributed to cross-agency hesitancy to support the DEIS. And the decision to switch to GE's 13-MW turbines at the last minute, a decision that both decreased costs for Vineyard Wind and minimized conflicts with fishermen due to the smaller surface area needed for the wind farm, could have triggered another lengthy delay if the new administration was not so eager to advance offshore wind.

If BOEM wants to maximize the deployment of offshore wind to support Biden's 2035 goal of a net-zero electricity sector, its permitting system should encourage mediating conflicts together, rather than requiring developers to navigate separate, concurrent negotiations. A new system should be forward-looking, anticipating wind farms not just in existing WEAs and call areas but also where they could be built in the next 20 to 30 years. It should be mitigation-focused, with the goal of minimizing

³⁴ Press Release, U.S. Dep't Interior, Interior Completes Environmental Review for Offshore Wind Project (March 8, 2021), <https://www.doi.gov/pressreleases/interior-completes-environmental-review-offshore-wind-project>; Notice of Availability of a Final Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts, 86 FR 14153 (March 12, 2021).



conflicts between offshore wind and other ocean uses. And, it should have a compensation backup, with an agreed-upon system for calculating losses fishermen experience and actually providing that compensation, rather than relying on individual negotiations between developers and fishing groups for each separate wind farm. These characteristics can form the basis of a system of collaborative governance for offshore wind permitting that may produce short-term delays but will maximize the long-term development of the US offshore wind industry while minimizing the harms forced upon fishermen and other ocean users.

II. The Potential of Environmental Collaboration

Collaborative governance in regulation and decision-making can encompass a variety of information-sharing and negotiation practices, including everything from public hearings and public comment periods to one-on-one and small-group mediation sessions.³⁵ The Council on Environmental Quality, the agency responsible for NEPA's implementing regulations, has encouraged agencies to engage in collaborative efforts with interested parties during the NEPA process by "cultivating shared vision, trust, and communication."³⁶ These values are exactly what is needed in the offshore wind permitting process.

A redesigned permitting process that places more emphasis on collaboration would have multiple benefits: consolidating the negotiation process would reduce costs and delays for developers; faster permitting would also minimize the problem of proposed technology becoming outdated by the time a project is ready to be built; a better-organized process would give fishermen more certainty for how and when their work will be impacted, and how they will be compensated. And the US as a whole would benefit from gaining access to more renewable energy faster. The biggest downside would be near-term delays in permitting as the revised program is developed and implemented. But, if the new system allowed individual projects to move towards construction faster, the upfront costs and delays would be well worth it.

³⁵ COUNCIL ON ENV'T. QUALITY, COLLABORATION IN NEPA: A HANDBOOK FOR NEPA PRACTITIONERS 3 (2007), https://ceq.doe.gov/docs/get-involved/Collaboration_in_NEPA_Oct2007.pdf.

³⁶ *Id.* at 4.



A. BOEM's Efforts at Collaborative Governance

Project Design Envelopes

One existing part of BOEM's permitting process that indirectly supports collaborative governance is its Project Design Envelope (PDE) approach. PDEs allow developers to submit a limited range of designs for a project, such as varying turbine size and number, for BOEM approval, rather than requiring new or revised permit applications for every small change in a project.³⁷ This allows developers to more easily adapt to unpredictable site characteristics and technological improvements during the permitting process.³⁸ PDEs can also be useful for outside interested parties, as they can see the full range of possible outcomes for the project, and can fit their response through public comments and other modes of advocacy to that range rather than just a single proposal that may not end up being the final design.

PDEs become ineffective, however, when the permitting process is so slow and technology is developing so fast that the developer would want to build a wind farm outside of the original design envelope by the time construction can begin. We've already seen this play out with Vineyard Wind, where the 13-MW turbines the developer now wants to use are significantly larger than the 8- to 10-MW turbines that were proposed in the company's COP from three years ago.³⁹ Failure to remain within the original PDE, while understandable from the perspective of the developer, required BOEM to engage in new environmental review that wasn't part of the original DEIS or its supplement.⁴⁰ It was also an inconvenience for other parties who focused their response to the 8- to 10-MW design and associated impacts. Shortening the permitting timeline would go a long way towards making the PDE system more effective for BOEM's environmental reviews, the public's participation, and the developer's project expectations.

³⁷ BUREAU OCEAN ENERGY MGMT., DRAFT GUIDANCE REGARDING THE USE OF A PROJECT DESIGN ENVELOPE IN A CONSTRUCTION AND OPERATIONS PLAN 1 (2018), <https://www.boem.gov/sites/default/files/renewable-energy-program/Draft-Design-Envelope-Guidance.pdf>.

³⁸ *Id.*

³⁹ Benjamin Storrow and Heather Richards, *Sources: Vineyard Wind Decision Imminent*, E&E NEWS (Mar. 5, 2021), <https://www.eenews.net/energywire/stories/1063726731/search?keyword=vineyard+wind>.

⁴⁰ *Id.*



Smart From The Start

The 2010 “Smart from the Start” initiative, discussed above, was BOEM’s first real attempt at resolving conflicting use disputes above the level of the individual lease. The project was arguably successful, as it resulted in the areas with the greatest expected opposition from the fishing industry being removed from consideration before leases were auctioned off. But the Massachusetts WEA is far from conflict-free. Vineyard Wind had to navigate negotiations with multiple competing fishing interests after securing its lease.

Another limitation of the “Smart from the Start” initiative is its narrow scope. After BOEM mapped out the RFI area that eventually became the Massachusetts WEA, the agency was focused on receiving input on which portions of the mapped area should be excluded from leasing. But in focusing solely on removal of portions of the lease area, BOEM delays consideration of multiple other important questions, such as the eventual orientation and spacing of turbines within the WEA⁴¹ and whether areas adjacent to or nearby the WEA could be subject to leasing in the future.

The initiative also relies on the public comment process, which lends itself to organized groups like industry organizations and government bodies while possibly missing concerns of unrepresented individuals like self-employed fishermen. BOEM was clearly receptive to substantive suggestions during the process of determining where leases would be offered, as evidenced by its decision to remove approximately half of the area initially proposed from consideration. These removals were suggested by the mayor of New Bedford, the state of Massachusetts, and the fishing industry group the American Alliance of Fishermen.⁴² Only a handful of comments came directly from fishermen. Those comments included general complaints about the proposal and asked BOEM to either cancel the project or move it to an entirely new area rather than directly addressing the question of whether certain proposed areas should be excluded.⁴³ Like most people, fishermen don’t have expertise in

⁴¹ See *supra* footnotes 27–34 and accompanying text.

⁴² See *supra* footnotes 12–14 and accompanying text.

⁴³ See Cameron Miele, Hunter Scalloping Company, Comment letter on Requests For Interest: Commercial Leasing for Wind Power on Outer Continental Shelf Offshore Massachusetts (April 29, 2011), <https://www.regulations.gov/comment/BOEM-2010-0063-0111>; Stephen Welch, Fishing Vessel Holly and Abby, Comment letter on Requests For Interest: Commercial Leasing for Wind Power on Outer Continental Shelf Offshore Massachusetts (April 29, 2011), <https://www.regulations.gov/comment/BOEM-2010-0063-0241>.



the public comment process, and may not have their interests fully represented through this process alone.⁴⁴ While Vineyard Wind and BOEM may reasonably have expected the public officials and industry association to more comprehensively engage with the community they purported to represent, the outcome indicates there is more to be done to ensure that all significant stakeholders are properly represented.

Offshore Wind Best Management Practices

BOEM has used a collaborative governance model to help it develop policies for its offshore wind program before. In 2013 and 2014, BOEM held a series of workshops to develop a set of best management practices (BMPs) for offshore wind developers to follow throughout leasing and development.⁴⁵ This process consisted of eight workshops hosted in or near major fishing towns along the eastern seaboard that could be affected by offshore wind development.⁴⁶ Participation in the meetings was invite-only and was extended to fishermen, offshore wind developers and others in the electricity industry, government officials, non-profit representatives, and others.⁴⁷

BOEM's goal for the workshops was to "involve participants in a collaborative, step-wise process with the goal of developing a list of potential BMPs and mitigation measures that would address concerns about possible conflicts between fishing operations and wind energy development."⁴⁸ At the workshops, a BOEM representative would give a short presentation on the agency's role in offshore wind development and the state of that development, and give participants an opportunity to ask questions.⁴⁹ They would then shift to a series of smaller breakout sessions where participants would identify potential issues with offshore wind development in their region, and then propose potential mitigation measures.⁵⁰ BOEM used the information received during the workshops on conflicts and

⁴⁴ BOEM appears to have relied on the relevant state governments, specifically Massachusetts and Rhode Island, to engage in hands-on conversations with fishermen and industry groups, as will be discussed further below. See *infra* footnotes 52–59 and accompanying text.

⁴⁵ BOEM, DEVELOPMENT OF MITIGATION MEASURES TO ADDRESS POTENTIAL USE CONFLICTS BETWEEN COMMERCIAL WIND ENERGY LESSEES/GRANTEES AND COMMERCIAL FISHERMEN ON THE ATLANTIC OUTER CONTINENTAL SHELF (2014), <https://www.boem.gov/sites/default/files/renewable-energy-program/Fishing-BMP-Final-Report-July-2014.pdf>.

⁴⁶ *Id.* at 3-5.

⁴⁷ *Id.* at 3-6.

⁴⁸ *Id.* at 3-9.

⁴⁹ *Id.* at 3-10.

⁵⁰ *Id.*



mitigation recommendations to develop the final BMPs, which the agency would then consider “for inclusion in future NEPA documents and as conditions in leases.”⁵¹

Although it successfully engaged the fishing industry, this BMP development process did not completely avoid opposition from fishermen of specific offshore wind developments. This was the result of multiple limitations in the process. One such limitation was the one-time nature of the process. The workshops only took place one time for a few hours at each location. This means that participants couldn’t learn from the process over time and become better representatives of their interests and communities. Second, the BMP development process included consideration of project size and spacing but did not consider the WEA siting process. This meant concerns over combinations of siting and design specifications were not fully addressed and potential agreements were being left on the table. Finally, there was a disconnect between the discussions at the workshops and actual implementation by BOEM. The BMP workshops were geared towards developing general practices rather than specific issues arising from a particular project. It did not replace the need for effective consultation on individual projects even if it resulted in a more reasonable starting point for those discussions.

B. State-level Collaboration Models

Rhode Island’s OSAMP, and the associated consultation efforts the state has pursued with fishermen regarding the offshore wind siting and permitting process, has filled some of the void left by BOEM’s lack of continued consultation on wind farm siting and fishermen compensation. The OSAMP specifies in its introduction that the OSAMP “is a tool for implementing adaptive management.”⁵² When BOEM was identifying areas for leasing in the Rhode Island/Massachusetts WEA, to the northwest of the Massachusetts WEA, the agency relied on vessel tracking data collected during the OSAMP drafting process to exclude particularly productive fishing areas.⁵³ Rhode Island also established the Fishermen’s Advisory Board to provide direct fishing industry input on activities

⁵¹ *Id.* at iii.

⁵² COASTAL RES. MGMT. COUNCIL, RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN 4 (2010), https://seagrant.gso.uri.edu/oceansamp/pdf/samp_crnc_revised/RI_Ocean_SAMP.pdf.

⁵³ Emily Twigg, *Atlantic Offshore Renewable Energy Development and Fisheries*, NAT’L ACAD. SCI., ENG’G, AND MED., Apr. 2018, at 2, <https://www.nap.edu/download/25062>.



governed by the OSAMP.⁵⁴ The Board, made up of six fishermen from the state, was directly involved in the negotiations with Vineyard Wind over the compensation package the company would establish in exchange for the consistency determination.⁵⁵

Massachusetts has similarly taken the lead in consultation with its state's fisherman for the Massachusetts WEA. The state's Executive Office of Energy and Environmental Affairs convened the Fisheries Working Group in 2011 in response to BOEM's offshore wind development proposals.⁵⁶ The working group, consisting of fishermen, fishing industry representatives, and state and federal agencies, is meant to be an informal body that can provide centralized feedback on offshore wind projects from the perspective of the fishing industry.⁵⁷ Massachusetts also has a Habitat Working Group, made up of state and federal agencies and NGOs such as Mass Audubon and the Conservation Law Foundation, that is focused on providing feedback on offshore wind proposals from a scientific/conservation perspective.⁵⁸ Both of these groups have been meeting every few months since their formation in 2011.⁵⁹ Feedback from these working groups influenced the state of Massachusetts' public comments to BOEM asking that the eastern half of the original RFI area be removed from consideration.⁶⁰

While these efforts resulted in changes, they did not fully avoid future objections from portions of the fishing communities who, for whatever reason, did not feel adequately represented in these efforts. For BOEM to rely on state-level consultation processes as the primary outreach to fishing communities, it needs to be sure the process is inclusive. Otherwise, it should consider its own complementary efforts.

⁵⁴ *Id.*

⁵⁵ RICRMC Fishermen's Advisory Board Meeting Minutes, CRMC (Jan. 3, 2019), http://www.crmc.ri.gov/meetings/2019_0103fab2.html

⁵⁶ *Fisheries Working Group on Offshore Wind*, MASS.GOV, <https://www.mass.gov/service-details/fisheries-working-group-on-offshore-wind-energy>.

⁵⁷ *Id.*

⁵⁸ *Habitat Working Group on Offshore Wind*, MASS.GOV, <https://www.mass.gov/service-details/habitat-working-group-on-offshore-wind-energy>.

⁵⁹ *Id.*; see also *Fisheries Working Group on Offshore Wind*, *supra* note 56.

⁶⁰ See Richard K. Sullivan Jr., Massachusetts Executive Office of Energy and Environmental Affairs., Comment letter on Requests For Interest: Commercial Leasing for Wind Power on Outer Continental Shelf Offshore Massachusetts (April 18, 2011), <https://www.regulations.gov/comment/BOEM-2010-0063-0245>.



III. Incorporating Collaborative Governance into BOEM's Permitting Process

From federal-level efforts like the “Smart from the Start” initiative and BOEM’s BMP workshops, to state-run programs like Rhode Island’s Fishermen’s Advisory Board and Massachusetts’ Fisheries Working Group, there have been multiple efforts to improve communication and consultation between the fishing industry and the burgeoning offshore wind industry. But it is clear from delays seen with the Vineyard Wind project that these efforts are not sufficient to allow rapid development of offshore wind without major opposition from fishermen.

A better system, which would require action from both Congress and BOEM, would shift more of the burden of facilitating consultation opportunities from the states to the federal government and create a uniform system to compensate fishermen negatively impacted by offshore wind development. The Biden Administration’s announcement on March 29, 2021 to advance a variety of offshore wind projects and programs included a commitment from Commerce Secretary Gina Raimondo that her agency would focus on mitigating conflicts between offshore wind developers and fishermen.⁶¹ Effective conflict mitigation would include some or all of the following characteristics.

A. Stakeholder Working Groups

First, BOEM should assemble multiple working groups, each with a regional focus, made up of fishermen, offshore wind developers, government officials, NGOs, and other interested parties, like the agency’s BMP workshops. The goal of these working groups would be to come up with guidelines for offshore wind farm siting, spacing, and orientation. The working group meetings would begin before a WEA is identified, continuing through leasing and construction of individual projects, and would result in recommendations to BOEM. This would encourage more discussion upfront rather than overlapping negotiations occurring separately, thus complicating and delaying the process. BOEM could use these workshops to develop a form of project design envelopes, potentially incorporating some into the lease terms and using the process to inform further permitting. Participants could recommend different designations for sites within the potential lease area (e.g. no

⁶¹ See Heather Richards, *Biden launches major push to expand offshore wind*, E&E NEWS (Mar. 29, 2021).



development, potential development, and optimal development) and acceptable orientation/spacing for those sites. Although the final decision of where to offer leases and what conditions to attach to them rests with BOEM, the agency can increase buy-in from participants by making it clear that its decisions will be based in large part on agreements forged through these working groups.⁶² Additional meetings following the WEA identification and lease auctions with the leaseholders within a WEA could engage more deeply with technical design and siting within the lease areas, potentially resulting in agreements between stakeholders even before permitting applications are submitted and smoothing the public comment and environmental assessment process.

The working groups should meet regularly, like the Massachusetts Fisheries Working Group and Habitat Working Group, to allow participants to build relationships throughout the process. Developing trust between participants is a crucial aspect of successful collaborative governance efforts,⁶³ and although it may delay initial aspects of the leasing process it can speed the overall process by addressing potential conflicts at the beginning.⁶⁴ Early collaborative governance efforts can also reduce and narrow future litigation through its improved communication and problem-solving structure.⁶⁵ This avoidance of litigation would be particularly useful for BOEM and offshore wind developers, as fishing industry groups have already shown their willingness to bring lawsuits over offshore wind siting decisions they oppose.⁶⁶

⁶² See COUNCIL ON ENV'T. QUALITY, *supra* note 35, at 4 (“Collaboration does not turn the NEPA process into a process where an agency’s responsibility to make sound decisions is replaced by how many votes are cast for a particular option or alternative. Collaboration does enable decision makers to consider any consensus that may have been reached among the interested and affected stakeholders, furthering the lead agency’s ability to make informed and timely decisions.”)

⁶³ See *id.* at 31 (“Groups need time to work out a process, to develop a shared vision, and to develop trust and respect between members.”). See also Chris Ansell & Alison Gash, *Collaborative Governance in Theory and Practice*, 18 J. PUB. ADMIN. RESEARCH AND THEORY 544, 563 (2007) (“Many of the case studies note that collaborative governance is a time-consuming process...[c]onsensus-building, in particular, requires time and cannot be rushed....”).

⁶⁴ See Ansell & Gash, *supra* note 63, at 563 (“[I]t needs to be pointed out that up-front investment in effective collaboration can sometimes save considerable time and energy in downstream implementation.”)

⁶⁵ See COUNCIL ON ENV'T. QUALITY, *supra* note 35, at 5 (“Collaboration can reduce the likelihood of litigation by including key stakeholders early and often, solving problems at the lowest possible level as they arise, and building agreements between stakeholders. Even if litigation ensues, the collaborative process may help narrow issues and make them more amenable to agreement.”).

⁶⁶ See Heather Richards, *Fishermen lose NEPA lawsuit over N.Y. offshore wind*, E&E News (Feb. 19, 2020), <https://www.eenews.net/energywire/stories/1062388765>. This lawsuit was



The working groups should also be designed to allow for a broader array of participants. One criticism of the state-specific working groups like Rhode Island's Fishermen's Advisory Board is that they exclude out-of-state groups that still have a stake in the proposals being discussed, such as New York fishermen who work in Rhode Island's OSAMP area.⁶⁷ Building the groups so all interested parties are represented is critical for establishing the legitimacy of the decision-making process.

B. Funding Adequate Staffing

Congress could support these efforts by increasing BOEM's budget to allow more staff to devote more time to facilitating these meetings. Industry experts have expressed concern that BOEM's renewable energy program is understaffed to process the COPs that have already been submitted to the agency.⁶⁸ If it is already understaffed for current operations, BOEM is unlikely to have sufficient staffing to develop additional collaborative consultation efforts even if it agrees it would be beneficial to do so. Increased agency staffing funding could decrease overall costs for offshore wind development by simplifying and speeding the permitting process for new projects, and it may even decrease direct costs to the agency by reducing workload and the potential for litigation later in the permitting process.

Finally, Congress should consider dedicating money raised from wind lease auctions to a fishermen compensation fund rather than the Treasury's general fund, and direct BOEM to work with NOAA Fisheries to develop a standardized method of calculating and distributing the compensation. BOEM's lease auctions have already raised hundreds of millions of dollars, and future leases could bring this into the billions.⁶⁹ A similar fund, the Fishermen's Contingency Fund, was set up by

⁶⁷ See Twigg, *supra* note 53, at 2.

⁶⁸ Lulia Gheorghiu, *BOEM needs staffing help with offshore wind permitting regardless of election results, experts say*, UTILITYDIVE (Oct. 15, 2020), <https://www.utilitydive.com/news/boem-interior-staffing-help-with-offshore-wind-permitting-election/587092/>.

⁶⁹ BOEM's auction for three leases in the Massachusetts WEA raised over \$400 million. *BIDDING BONANZA! Trump Administration Smashes Record for Offshore Wind Auction with \$405 Million in Winning Bids*, U.S. DEP'T OF THE INTERIOR (Dec. 14, 2018), <https://www.doi.gov/pressreleases/bidding-bonanza-trump-administration-smashes-record-offshore-wind-auction-405-million>. Industry experts have predicted that further lease auctions for leases off of Maine, New York, California, and the Carolinas could raise an additional \$1.7 billion. Lulia Gheorghiu, *Offshore wind report forecasts \$1.7B of revenue from new federal lease auctions by 2022*, UTILITYDIVE (Aug. 4, 2020), <https://www.utilitydive.com/news/offshore-wind-report-forecasts-17b-of-revenue-from-new-federal-lease-auct/582931/>.



Congress to compensate fishermen for losses caused by oil and gas development on the Outer Continental Shelf and is funded through a fee charged to leaseholders.⁷⁰

BOEM and NOAA's efforts to standardize the compensation process should also be part of the discussion in the working groups. As with the tradeoffs between siting, spacing, and orientation discussed above, the availability and structure of compensation can affect the characteristics of agreements reached by the working groups.

Conclusion

Ultimately the goal is to consolidate BOEM's decision-making process and to better incorporate fishermen's voices in that process. The current multi-step process of public comments for siting and narrow negotiations for spacing, orientation, and mitigation/compensation is too long for the agency and developers to efficiently permit and build wind farms, and too complicated for fishermen to effectively participate and feel that their voices are heard. By building off of collaborative governance efforts the agency has already employed, and folding in state-level efforts like those in Rhode Island and Massachusetts, BOEM can create a structured environment where developers, fishermen, scientists, and government representatives can collaborate, build trust, and reach consensus around solutions that allow both the fishing industry and offshore wind industry to thrive.

⁷⁰ 43 U.S.C. §1842; see also *Fishermen's Contingency Fund Program*, NOAA FISHERIES, <https://www.fisheries.noaa.gov/national/funding-and-financial-services/fishermens-contingency-fund-program>.