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Fissues in the Windustry: Mitigating Fishing Industry Concerns While Promoting Offshore Wind

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INTRODUCTION

Offshore wind development is the next great frontier for energy production in the United States. The technical potential for offshore wind is more than 2,000 gigawatts, double the nation's current electricity use and far greater than the potential for wind energy produced on land.[1] Despite this enormous potential, the United States has no commercial-scale offshore wind farms[2] and only two active offshore wind farms at this time, off the coasts of Rhode Island and Virginia.[3]

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1 Liz Hartman, *Computing America's Offshore Wind Energy Potential*, OFF. OF ENERGY EFFICIENCY & RENEWABLE ENERGY (Sept. 9, 2016), https://www.energy.gov/eere/articles/computing-america-s-offshore-wind-energy-potential [https://perma.cc/TTJ8-AMP8].

2 On March 8, 2021, the Department of Interior finished its environmental review of Vineyard Wind. Vineyard Wind is a proposed 800-megawatt project off the coast of Massachusetts that would be the nation's first commercial-scale offshore wind project. *See Vineyard Wind 1*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/vineyard-wind [https://perma.cc/QAT9-4JP7] (last visited Feb. 11, 2022); *Benefits*, VINEYARD WIND, https://www.vineyardwind.com/vw1-benefits [https://perma.cc/D79F-U4SJ] (last visited Feb. 11, 2022).

3 AM. WIND ENERGY ASS'N, U.S. OFFSHORE WIND INDUSTRY STATUS UPDATE 1 (2021), https://cleanpower.org/wp-content/uploads/2021/02/ACP_FactSheet-Offshore_Update_10.15.21.pdf [https://perma.cc/5E78-G2Z6]; *Coastal Virginia Offshore Wind*, DOMINION ENERGY, https://www.dominionenergy.com/projects-and-facilities/wind-power-facilities-and-projects/coastal-virginia-offshore-wind [https://perma.cc/3VFW-K4TH] (last visited Feb. 11, 2022).

Many concerns accompany the development of offshore wind, including a lack of scientific studies on the effects offshore wind farms have on the fishing industry.[4] The fishing industry has been successfully fighting back on the development of offshore wind farms. To ensure the success of President Biden's ambitious offshore wind development plan, the Bureau of Ocean Energy Management (BOEM) and state and local governments must adequately consider the fishing industry.

This Article explains the piecemeal approach of the many laws that control the development of offshore wind farms and how those laws work together. This Article then analyzes ways that the fishing industry can be better integrated into the development process to reduce tensions between the fishing industry and offshore development. Finally, this Article gives the following five recommendations to better incorporate the fishing industry into offshore wind development and thereby help alleviate concerns the fishing industry has regarding offshore development: (1) developers should focus on offshore wind's potential to mitigate the harmful effects to fisheries caused by climate change when promoting development; (2) BOEM should assess the impacts of construction in the first environmental assessment and environmental impact statement instead of assessing only impacts caused by preconstruction activity; (3) the Fishermen's Contingency Fund should be expanded to include harmful effects to fisheries caused by renewable energy development, not just oil and gas development; (4) states should include the fishing industry in their coastal management programs that focus on offshore development under the Coastal Zone Management Act; and (5) BOEM's Intergovernmental Renewable Task Forces should include at least one member from Regional Fishery Management Councils.

The potential for offshore wind development under the Biden administration is great, but the fishing industry must be included in the development process in order to move forward. The fishing industry must be included throughout the entire process, from the preconstruction phase to the decommissioning phase, and development

4 *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/northeast/in-northeast-more-research-needed-on-offshore-winds-impact-on-fishing/ [https://perma.cc/A4CW-WNJR]; Jon Kalis, *Fisherman Fear Damage from Wind Farms Along the Eastern Seaboard*, NPR (Dec. 4, 2017), https://www.npr.org/sections/thesalt/2017/12/04/567017528/fishermen-fear-damage-from-wind-farms-along-the-eastern-seaboard [https://perma.cc/6E57-5D5L].

must be located in areas that will not significantly harm the fishing industry.

I
CONTROLLING LAWS

Many laws and policies govern the development of wind farms on the Outer Continental Shelf.[5] These laws work together to create a piecemeal approach to the law of the wind on the Outer Continental Shelf. As only two offshore wind farms exist in the United States at this time,[6] governing offshore wind still has many unknowns. This Article will examine parts of the Outer Continental Shelf Lands Act (OCSLA), The Fishermen's Contingency Fund (The Fund), the Coastal Zone Management Act (CZMA), the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Energy Policy Act of 2005 (The Act), three executive orders, and the Bureau of Ocean Energy Management.

There are numerous legal jurisdictions involved in offshore wind development and the locations where states can build the turbines. The Submerged Lands Act (SLA) of 1953 clarified that states have rights to the natural resources within submerged lands from the shore to three nautical miles[7] into the Pacific, Arctic, and Atlantic oceans and the Gulf of Mexico.[8] CZMA set up a national framework that states can use to help manage their coastal resources.[9] The submerged lands seaward of state jurisdiction, through the Exclusive Economic Zone (EEZ), are under federal control, and OCSLA establishes federal responsibilities over the submerged lands in the Outer Continental Shelf.[10] A 1983 Presidential Proclamation establishes the EEZ, which

5 Outer Continental Shelf refers to all submerged lands lying seaward of state submerged lands that are subject to U.S. jurisdiction and control. 43 U.S.C. § 1331(a).

6 Anmar Frangoul, *America's Second Offshore Wind Farm Completes Construction*, CNBC (June 30, 2020, 12:13 PM), https://www.cnbc.com/2020/06/30/americas-second-offshore-wind-farm-completes-construction.html [https://perma.cc/2GGS-827Y].

7 The two exceptions to this rule are Texas and the Gulf side of Florida. *Outer Continental Shelf*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/oil-gas-energy/leasing/outer-continental-shelf [https://perma.cc/UST9-KNUB] (last visited Feb. 11, 2022).

8 43 U.S.C. §§ 1301–1356b; *see also BOEM Governing Statutes*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/about-boem/regulations-guidance/boem-governing-statutes [https://perma.cc/SV5D-LS94] (last visited Feb. 11, 2022) [hereinafter *BOEM Governing Statutes*].

9 16 U.S.C. §§ 1451–1465.

10 43 U.S.C. §§ 1331–1365b.

extends up to two hundred nautical miles from the coastline.[11] Within the EEZ, the United States has the right to conduct activities "for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds" and jurisdiction to install structures that have an economic purpose.[12]

A. The Outer Continental Shelf Lands Act

The Outer Continental Shelf includes all submerged lands that are seaward of state navigable waters[13] and are subject to the jurisdiction and control of the United States. OCSLA states that the Outer Continental Shelf is a "vital natural resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other needs."[14] Most of OCSLA expressly covers only oil and gas leasing, as offshore wind projects are still relatively new, and OCSLA has not been amended to fully cover leasing on the Outer Continental Shelf related to renewable energy.[15]

The Secretary of the Interior administers OCSLA as it relates to leasing on the Outer Continental Shelf.[16] The Secretary may grant a lease, easement, or right-of-way on the Outer Continental Shelf for activities that "produce or support production, transportation, or transmission of energy from sources other than oil or gas."[17] Before land is leased on the Outer Continental Shelf, the president may withdraw the unleased land from disposition.[18] The Secretary must issue leases, easements, or rights-of-way on a competitive basis unless it is determined after a hearing that there is no competitive interest.[19]

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11 Proclamation No. 5030, 48 Fed. Reg. 10,605 (Mar. 10, 1983). The MSA codified the EEZ as law. *See* 16 U.S.C. § 1811.

12 Proclamation No. 5030, 48 Fed. Reg. 10,605.

13 The Submerged Lands Act defines navigable waters as all lands that are covered by nontidal waters that were navigable under the laws of the United States at the time of statehood, up to the ordinary high-water mark. 43 U.S.C. § 1301(a)(1).

14 43 U.S.C. § 1332(3).

15 *See* Peter J. Schaumberg & Angela F. Colamaria, *Siting Renewable Energy Projects on the Outer Continental Shelf: Spin, Baby, Spin!*, 14 ROGER WILLIAMS U. L. REV. 624, 625 (2009).

16 43 U.S.C. § 1334(a).

17 *Id.* § 1337 (p)(1)(C).

18 *Id.* § 1341(a).

19 *Id.* § 1337 (p)(3).

The Secretary has to ensure that any activity provides for protection of the environment,[20] conservation of Outer Continental Shelf natural resources,[21] prevention of interference with the reasonable uses of the exclusive economic zone,[22] and that consideration is given to any other use of the sea or seabed, including fishery use.[23]

Operations and activities can be suspended or temporarily prohibited if there "is a threat of serious irreparable, or immediate harm or damage to life (including fish and other aquatic life) . . . or to the marine, coastal, or human environment."[24] Cancellation of a lease or permit may occur if the Secretary determines, after a hearing, that continued activity "would probably cause serious harm or damage to life (including fish and other aquatic life)."[25] The threat of harm or damage would "not disappear or decrease to an acceptable extent within a reasonable period of time,"[26] and the "advantages of cancellation outweigh the advantages of continuing such lease or permit in force."[27] If the lease or permit is canceled, the lessee is entitled to receive compensation for the fair value of the canceled rights at the date of cancellation or the excess over the revenues from the lease.[28]

OCSLA requires the Secretary to conduct a study in all areas included in "any oil and gas lease sale or other lease in order to establish information needed for assessment and management of environmental impacts on the human, marine, and coastal environments of the Outer Continental Shelf."[29] After the leasing and development of an area or region, the Secretary must conduct "additional studies to establish environmental information" as deemed necessary and "monitor the human, marine, and coastal environments of such area[s] or region[s]" to compare previous data "for the purpose of identifying any significant changes in the quality and productivity of such environments" to help identify the causes of any changes.[30] The Secretary may use information that other Federal agencies have prepared instead of conducting new studies, as well as information obtained from state and

20 *Id.* § 1337 (p)(3), (4)(B).
21 *Id.* § 1337 (p)(3), (4)(D).
22 *Id.* § 1337 (p)(3), (4)(E).
23 *Id.* § 1337 (p)(3), (4)(J)(ii).
24 *Id.* § 1334(a)(1).
25 *Id.* § 1334(a)(2)(A)(i).
26 *Id.* § 1334(a)(2)(A)(ii).
27 *Id.* § 1334(a)(2)(A)(iii).
28 *Id.* § 1334(2)(C).
29 *Id.* § 1346(a)(1).
30 *Id.* § 1346(b).

local governments.[31] The Secretary must consider the "available relevant environmental information in making decisions . . . in developing appropriate regulations and lease conditions, and in issuing operating orders."[32] After the end of every three years, the Secretary submits to Congress, and makes publicly available, an assessment of the cumulative effect of activities on the human, marine, and coastal environments.[33]

1. The Fishermen's Contingency Fund

OCSLA provides for the Fishermen's Contingency Fund, which compensates fishermen for losses caused by obstructions related to oil and gas development but not losses caused by renewable energy development.[34] The OCSLA Amendments of 1978 established the Fishermen's Contingency Fund[35] within the United States Treasury as a revolving fund that is available without fiscal year limitation.[36] The Fund was created to pay fishermen for property and economic losses caused by the oil and gas industry on the Outer Continental Shelf.[37] Fishermen are eligible to be compensated by the Fund if they can prove that they "suffered losses in income due to inability or reduced capacity to fish as a result of the damage sustained."[38]

All holders of exploration permits, leases, easements, or rights-of-way under OCSLA must pay assessments into the Fund.[39] The Fund also consists of "revenues received from investments made under" the interest-bearing accounts portions of the Fund[40] and amounts recovered by the Secretary of the Interior against "any person found to be responsible for the damages with respect to" claims that are made.[41] The Fund ensures that it will have enough money necessary to pay claims and expenses by notifying the Secretary that additional

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31 *Id.* § 1346(c).

32 *Id.* § 1346(d).

33 *Id.* § 1346(e).

34 *See* 50 C.F.R. § 296.1 (2021).

35 Title IV of OCSLA created the Fishermen's Contingency Fund.

36 43 U.S.C. § 1842(a)(1).

37 *Fishermen's Contingency Fund Program*, NAT'L OCEANIC & ATMOSPHERIC ASS'N, https://www.fisheries.noaa.gov/national/funding-and-financial-services/fishermens-contingency-fund-program [https://perma.cc/RSG9-3V63] (last visited Feb. 11, 2022).

38 *Id.*

39 43 U.S.C. § 1842(b)(1).

40 *Id.* § 1842(a)(1)(A).

41 *Id.* § 1845(h)(2).

assessments are needed if the amount in the Fund drops below what is necessary.[42] The Fund does not charge excessive fees, with no holder being required to pay over $5,000 for any lease, permit, easement, or right-of-way in a single calendar year.[43]

B. The Coastal Zone Management Act

CZMA establishes a national framework for states to consider and manage their coastal resources and encourages states to develop coastal zone management programs.[44] If a state chooses to develop a coastal zone management program, the state can include in its program issues that the state deems most important, such as renewable energy and fisheries, and policies to address any issues that may arise.[45] CZMA is administered by the National Oceanic and Atmospheric Association (NOAA)[46] and was created because Congress found that the demands put on the coastal areas created a need "for resolution of serious conflicts among important and competing uses and values in coastal and ocean waters[.]"[47] Congress found that the key to protecting the land and water resources was to "encourage the states to exercise their full authority over the lands and waters in the coastal zone"[48] by developing land and water use programs.[49] A goal of CZMA is "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone" for current and future generations.[50] Coastal states have an important interest "in the protection, management, and development of the resources of the exclusive economic zone."[51] Their interests are served through the coastal states participating in Federal programs affecting coastal resources and through the development of state ocean resources plans

42 50 C.F.R. § 296.3(b)(1) (2021).

43 43 U.S.C. § 1842(b)(1).

44 16 U.S.C. §§ 1451–1465.

45 *Id.*

46 *Coastal Zone Management Act*, NAT'L OCEANIC & ATMOSPHERIC ASS'N, https://coast.noaa.gov/czm/act/ [https://perma.cc/LW78-N329] (last visited Feb. 11, 2022).

47 16 U.S.C. § 1451(f).

48 The term coastal zone means the coastal waters and the adjacent shorelands. The coastal zone is seaward three nautical miles and does not include land held in trust by the federal government. *Id.* § 1453(1).

49 *Id.* § 1451(i).

50 *Id.* § 1452(1).

51 *Id.* § 1451(m).

included in the coastal zone management programs that are federally approved.[52]

States control their own programs under CZMA, but CZMA contains priorities and requirements that states must consider when creating their plans.[53] CZMA prioritizes coastal-dependent uses and processes for siting major facilities related to energy, fisheries development, and more.[54] While states control their own plans, CZMA requires procedures to be in place for states to consult and coordinate with federal agencies and ensure that states adequately consider the views of the federal agencies.[55] State coastal management programs must include, in part, identification of permissible uses of the land and water that will have "a direct and significant impact on the coastal waters,"[56] identification of the ways the state plans to exert control over the permissible uses,[57] and a planning process for energy facilities that will be in or affect the coastal zone and the processes for managing the impacts of these facilities.[58] The programs must adequately consider the national interest in "siting facilities such as energy facilities which are of greater than local significance."[59] Once the state has completed its coastal management program, the Secretary of Commerce reviews and approves the program.[60]

Once a state has an approved coastal management program, the state manages the coastal zone in accordance with the program, and almost all federal actions must be consistent with the state's program.[61] The state "has authority for the management of the coastal zone in accordance with the management program" and that authority allows the state to administer regulations to control development to ensure compliance with the management program, resolve conflicts, and to acquire fee simple title when necessary to achieve conformance with the management program.[62] The state's control can be done by establishing standards for local implementation, state planning and

52 *Id.*
53 *See id.* §§ 1451–1455.
54 16 U.S.C. § 1452(2)(D).
55 *Id.* § 1452(2)(G)–(H).
56 *Id.* § 1455(d)(2)(B).
57 *Id.* § 1455(d)(2)(D).
58 *Id.* § 1455(d)(2)(H).
59 *Id.* § 1455(d)(8).
60 *Id.* § 1454.
61 *See id.* §§ 1455–1456.
62 *Id.* § 1455(d)(10)(A)–(B).

regulations, and state administrative review for consistency with the management program.[63] The public also can participate in the permitting processes and consistency determinations.[64]

All management programs must consider federal agencies principally affected by the program[65] because, after the program is approved, any federal agency activity that affects land, water, or natural resource use within the coastal zone must be "carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs."[66] The President of the United States can exempt an inconsistent federal action if he "determines that the activity is in the paramount interest of the United States," but if an action is not exempted, federal agencies must provide a consistency determination to the State no later than ninety days before final approval of the federal activity unless a different schedule is agreed to.[67] Federal agencies cannot grant a license or permit for a project that a state timely objects to as inconsistent with its coastal management program unless, on appeal to the Secretary of Commerce, the Secretary determines that the project is consistent with the purposes of CZMA or is necessary for national security.[68]

C. The Energy Policy Act of 2005

Section 2 of the Energy Policy Act of 2005 focuses on renewable energy. The Act requires the Secretary of Energy to conduct a yearly review of assessments of renewable energy resources, including wind and ocean resources.[69] A yearly report must be published based on the assessment, which must contain an inventory of the available amount and characteristics of the resources and other information such as the barriers to providing adequate transmission.[70] The Act requires that a part of the total amount of electric energy that the Federal Government consumes must be renewable energy, with "[n]ot less than 7.5 percent" being renewable energy in 2013 and in the years after.[71]

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63 *Id.* § 1455(d)(11)(A)–(C).
64 *Id.* § 1455(d)(14).
65 *Id.* § 1456(b).
66 *Id.* § 1456(c)(1)(A).
67 *Id.* § 1456(c)(1)(B)–(C).
68 *See id.* § 1456(c)(3)(A), (d).
69 42 U.S.C. § 15851(a).
70 *Id.* § 15851(b)(1)–(2).
71 *Id.* § 15852 (a)(3).

The Act calls for programs for renewable energy research, development, demonstration, and commercial application.[72] The objectives of those programs are increasing conversion efficiency, decreasing the costs of generation and delivery, promoting "diversity of the energy supply," decreasing the United States' dependence on foreign energy supplies, improving energy security, decreasing the environmental impact, and increasing the export of "renewable energy equipment."[73] The Act explicitly calls for a "program of research, development, demonstration, and commercial application for wind energy," including offshore wind energy.[74]

D. The Magnuson-Stevens Fishery Conservation and Management Act

To combat overfishing and the decline of fish stocks, Congress enacted MSA in 1976.[75] The MSA governs marine fisheries management in the federal waters of the United States.[76] The MSA is meant to foster the long-term biological and economic sustainability of fisheries.[77] Key objectives of the MSA are to prevent overfishing, rebuild fisheries that have been overfished, "[i]ncrease long-term economic and social benefits," and to "[e]nsure a safe and sustainable supply of seafood."[78] The MSA has been amended twice, once in 1996 with the Sustainable Fisheries Act (SFA) and once in 2007 with the MSA Reauthorization Act.[79]

Congress was responding to the decline of fish stocks because fish are resources that "contribute to the food supply, economy, and health of the Nation" and "[c]ommercial and recreational fishing constitutes a major source of employment" that had been hurt by the "activities of massive foreign fishing fleets."[80] Congress recognized that "[f]ishery resources are finite but renewable" and that "fisheries can be conserved and maintained so as to provide optimum yields on a continuing

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72 *Id.* § 16231(a)(1).

73 *Id.* § 16231(a)(1)(A)–(G).

74 *Id.* § 16231(a)(2)(B)(ii).

75 *Magnuson-Stevens Act*, NAT'L OCEANIC & ATMOSPHERIC ASS'N, https://www.fisheries.noaa.gov/topic/laws-policies [https://perma.cc/R57G-SP6V] (last visited Feb. 11, 2022).

76 *Id.*

77 *Id.*

78 *Id.*

79 *Id.*

80 16 U.S.C. § 1801(a)(1)–(3).

basis."[81] The MSA noted that commercial and recreational fisheries are threatened by "the continuing loss of marine, estuarine, and other aquatic habitats" and that conservation and management of fisheries require habitat to be considered.[82] One of the purposes of the MSA is "to promote the protection of essential fish habitat in the review of projects conducted under federal permits, licenses, or other authorities that affect or have the potential to affect such habitat."[83]

Fishery management plans created by Regional Fishery Management Councils[84] work to identify essential fish habitats, and fishery participants work to provide the Councils with information regarding adverse impacts on the habitat and actions that would conserve and enhance the habitat.[85] Federal agencies are provided this information and work to further conserve and enhance the essential fish habitat,[86] as well as consult with the Secretary of Commerce with respect to any action authorized, funded, undertaken, or proposed that may adversely affect any essential fish habitat.[87] Each Council may make comments or recommendations on any action or proposed action that may affect the habitat of a fishery resource, but they must comment and make recommendations "concerning any activity that . . . is likely to substantially affect the habitat . . . of an anadromous fishery resource under its authority."[88] If the Secretary of Commerce finds that any Federal or State action would adversely affect any essential fish habitat, the Secretary must recommend measures that can be taken to conserve the habitat.[89] A federal agency must respond within thirty days and include "a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on such habitat," and if the response is not consistent with the Secretary's recommendations, the agency must explain its reasons for not following the recommendations.[90]

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81 *Id.* § 1801(a)(5).

82 *Id.* § 1801(a)(9).

83 *Id.* § 1801(b)(7).

84 16 U.S.C. § 1852 created eight Regional Fishery Management Councils to oversee the management process for fisheries in need of conservation. *Id.* § 1852(a)(1)(A)–(H).

85 *Id.* § 1855(b)(1)(A)–(B).

86 *Id.* § 1855(b)(1)(D).

87 *Id.* § 1855(b)(2).

88 *Id.* § 1855(b)(3)(A)–(B).

89 *Id.* § 1855(b)(4)(A).

90 *Id.* § 1855(b)(4)(B).

E. Executive Orders

The President has broad authority to issue executive orders focusing on areas he finds important.[91] For example, both Presidents Obama and Trump issued executive orders on Ocean Policies: President Trump issued an executive order related to energy, and President Biden has issued an executive order on climate.[92]

1. President Obama's Executive Order on Ocean Policy

In July 2010, President Obama issued an executive order focused on stewardship of the ocean, coasts, and Great Lakes.[93] This policy was created after the Deepwater Horizon oil spill, which reminded the nation "of how vulnerable our marine environments are, and how much communities and the Nation rely on healthy and resilient ocean and coastal ecosystems."[94] The Policy adopted the recommendations of the Interagency Ocean Policy Task Force and was implemented under the guidance of the National Ocean Council.[95] The Policy was to ensure the "protection, maintenance, and restoration" of the ocean and coastal ecosystems and resources, "enhance the sustainability of ocean and coastal economies," preserve maritime heritage, "support sustainable uses and access," and allow for "adaptive management" in the face of climate change and ocean acidification.[96]

The Policy also called for the development of spatial plans to allow for "a more integrated, comprehensive, ecosystem-based, flexible, and proactive approach to planning and managing sustainable multiple uses across sectors and improve the conservation of the ocean, our coasts, and the Great Lakes."[97] The planning was to help "reduce conflicts among uses" and "facilitate compatible uses."[98] One of the policy goals was to "protect, maintain, and restore the health and

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91 JONATHAN M. GAFFNEY, CONG. RSCH. SERV., EXECUTIVE ORDERS: AN INTRODUCTION 2 (Mar. 29, 2021), https://crsreports.congress.gov/product/pdf/R/R46738 [https://perma.cc/E6B3-R9VV].

92 *See* Exec. Order No. 13,547, 75 Fed. Reg. 43,021 (July 22, 2010); Exec. Order No. 13,840, 83 Fed. Reg. 29,431 (June 19, 2018); Exec. Order No. 13,868, 84 Fed. Reg. 15,495 (Apr. 10, 2019); Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

93 Exec. Order No. 13,547, 75 Fed. Reg. at 43,023.

94 *Id.*

95 *Id.*

96 *Id.*

97 *Id.*

98 *Id.* at 43,024.

biological diversity" of marine and coastal ecosystems and resources.[99] Other goals of the Policy were to "use the best available science and knowledge to inform decisions affecting the ocean, our coasts, and the Great Lakes, and enhance humanity's capacity to understand, respond, and adapt to a changing global environment" and to "respect and preserve our Nation's maritime heritage, including our social, cultural, recreational, and historical values."[100]

2. President Trump's Executive Order on Ocean Policy

President Trump's Ocean Policy, issued in 2018, revoked President Obama's Ocean Policy[101] and focused the nation's ocean policy away from stewardship of ocean and coastal resources toward the economic interests of those resources instead.[102] Two of the interests focused on are domestic energy production to reduce reliance on imported energy and fisheries resources, which help feed the nation and present tremendous export opportunities.[103] The Policy called for "efficient interagency coordination on ocean-related matters" and engagement of ocean stakeholders to maintain and enhance these benefits.[104]

President Trump's policy aimed for effective management through coordinated activities of executive departments and the promotion of lawful uses of the ocean.[105] The Policy aimed at facilitating the economic growth of ocean industries and coastal communities, including feeding the American people and enhancing energy security.[106] While President Trump's policy encouraged agencies working together to make the process more efficient, it also worked to "ensure that Federal regulations and management decisions do not prevent productive and sustainable use of ocean, coastal, and Great Lakes waters."[107]

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99 *Id.* at 43,023.

100 *Id.* at 43,023–24.

101 Exec. Order No. 13,840, 83 Fed. Reg. 29,431 (June 22, 2018).

102 Maya Wei-Haas, *Trump Just Remade Ocean Policy – Here's What That Means*, NAT'L GEOGRAPHIC (July 13, 2018), https://www.nationalgeographic.com/environment/article/news-ocean-policy-indigenous-sustainability-fisheries-industry-economy-marine [https://perma.cc/B3DX-NF7A].

103 *Id.*

104 Exec. Order No. 13,840, 83 Fed. Reg. at 29,431.

105 *Id.*

106 *Id.*

107 *Id.*

3. President Trump's Executive Order on Energy

In 2019, President Trump issued an executive order to promote energy infrastructure and economic growth.[108] The focus of this Policy is to "enable the timely construction of the infrastructure needed to move our energy sources" through the promotion of "efficient permitting processes" and reducing "regulatory uncertainties" to lower the cost of energy projects and encourage new investment.[109] The United States will reach these goals through permitting processes with clear and reasonable timetables,[110] "timely action on infrastructure projects[,]"[111] increased regulatory certainty,[112] and "effective stewardship of America's natural resources."[113] The Policy calls for "[t]he Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce [to] approve rights-of-way for energy infrastructure through lands owned by or within the jurisdiction or control of the United States."[114] For those leases that include sunset provisions, the Secretaries, to prevent uncertainty, must develop a master agreement for renewals and reauthorizations and "within 1 year of the date of this order, initiate renewal or reauthorization processes for all expired energy rights-of-way grants, leases, permits, and agreements, as determined to be appropriate by the applicable Secretary and to the extent permitted by law."[115]

4. President Biden's Order on Climate

President Biden issued an executive order that, in part, directs the Secretary of the Interior to review siting and permitting processes in offshore waters.[116] The Secretary identifies what steps can be taken to increase the production of renewable energy in those waters and shares that information with the National Climate Task Force.[117] The Biden Administration committed to doubling the United States' use of offshore wind by 2030.[118] Doing so would mean thirty gigawatts of

108 Exec. Order No. 13,868, 84 Fed. Reg. 15,495 (Apr. 15, 2019).
109 *Id.*
110 *Id.*
111 *Id.*
112 *Id.*
113 *Id.*
114 Exec. Order No. 13,868, 84 Fed. Reg. 15,495, 15,497 (Apr. 15, 2019).
115 *Id.* at 15,497–98.
116 Exec. Order No. 14,008, 86 Fed. Reg. 7619, 7624 (Feb. 1, 2021).
117 *Id.*
118 *Id.*

energy would be produced, enough energy to power almost ten million homes annually.[119]

F. BOEM's Renewable Energy Program

The Energy Policy Act of 2005 granted BOEM[120] the authority to manage ocean renewable energy projects on federal Outer Continental Shelf lands.[121] BOEM's Outer Continental Shelf renewable energy program is in charge of developing offshore renewable energy from wind, ocean waves, and ocean currents.[122] The BOEM Office of Renewable Energy Programs "oversees orderly, safe, and environmentally responsible renewable energy development activities on the [Outer Continental Shelf]."[123] The Program is in charge of granting leases, easements, and rights of way for offshore renewable energy and works with federal, state, and tribal governments through fourteen renewable energy task forces.[124]

In 2009, the Department of the Interior finalized the regulations for the Outer Continental Shelf Renewable Energy Program, authorized by the Energy Policy Act of 2005.[125] The 2009 regulations provide a framework for producing and transmitting energy from sources other

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119 Celina Tebor, *U.S. to Accelerate Offshore Wind Energy Use as Industry Sees Global Growth*, L.A. TIMES (Aug. 26, 2021), https://www.latimes.com/world-nation/story/2021-08-26/us-offshore-wind-farms [https://perma.cc/8BHG-3DHW].

120 BOEM is an agency within the Department of the Interior and was established in 2010 with the reorganization of the former Mineral Management Service (MMS) when it was divided into three separate entities. Press Release, U.S. Dep't of the Interior, Salazar Divides MMS's Three Conflicting Missions (May 12, 2010), https://www.doi.gov/news/pressreleases/Salazar-Divides-MMSs-Three-Conflicting-Missions [https://perma.cc/H8W8-WHKU]. BOEM is responsible for "the sustainable development" of the energy resources on the Outer Continental Shelf. *The Reorganization of the Former MMS*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/Reorganization/ [https://perma.cc/2N25-H2HR] (last visited Feb. 11, 2022). BOEM's functions include leasing, environmental studies, National Environmental Policy Act analysis, and the renewable energy program. *Id.* The mission of BOEM is "to manage development of U.S. Outer Continental Shelf energy and mineral resources in an environmentally and economically responsible way." *About BOEM*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/About-BOEM/ [https://perma.cc/WN2W-47NL] (last visited Feb. 11, 2022).

121 *BOEM Governing Statutes*, *supra* note 8.

122 *Fact Sheet*, BUREAU OF OCEAN ENERGY MGMT. (Feb. 2018), https://www.boem.gov/sites/default/files/boem-newsroom/BOEM-Fact-Sheet.pdf [https://perma.cc/PUU4-LVZ3].

123 *Id.*

124 *Id.*

125 *Renewable Energy on the Outer Continental Shelf*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/Renewable-Energy-Program-Overview/ [https://perma.cc/B4Y6-9HWE] (last visited Feb. 11, 2022); 43 U.S.C. §§ 1331–1356b (the Energy Policy Act of 2005 section 388 amended OCSLA section 8).

than oil and gas.[126] As of August 2019, the Office of Renewable Energy Programs has fifteen active offshore wind leases with over twenty-one gigawatts of capacity.[127] Five of these leases are in Massachusetts, two are in Rhode Island and Massachusetts, two are in Delaware, two are in New Jersey, and Virginia, Maryland, New York, and North Carolina each have one lease.[128] BOEM is currently in the planning stages for other areas offshore of New York, South Carolina, California, and Hawaii.[129]

During the Environmental Assessment (EA), prepared prior to lease issuance, and the Environmental Impact Statement (EIS), prepared prior to Construction and Operations Plan approval, BOEM "considers the individual and cumulative impacts to fisheries . . . from proposed and reasonably foreseeable activities."[130] BOEM works with commercial and recreational fishermen to understand concerns from both a socioeconomic and biological perspective.[131] BOEM has focused their engagement through "Regional Fishery Management Councils, participation in state-led fishery advisory group meetings, and convening a National Academies Fisheries Steering Committee."[132] BOEM incorporates the recommendations by issuing guidelines or including stipulations for fisheries communications plans, developing a fishing industry webpage, and working with state partners to address potential impacts related to development.[133]

Through BOEM's National Environmental Policy Act (NEPA) compliance, BOEM identifies environmental, economic, and social impacts related to the offshore wind facilities.[134] BOEM may include

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126 *See* 43 U.S.C. §§ 1331–1356b; 43 U.S.C. § 1337(p)(1)(C).

127 *BOEM's Renewable Energy Program*, BUREAU OF OCEAN ENERGY MGMT. (Aug. 2019), https://www.boem.gov/BOEM-RE-Programs-Fact-Sheet/ [https://perma.cc/F8HT-V5F8].

128 *Id.*

129 *Id.*

130 *Commercial Fishing Frequently Asked Questions Wind Energy on the Outer Continental Shelf*, BUREAU OF OCEAN ENERGY MGMT. (Sept. 2018), https://www.boem.gov/sites/default/files/uploadedFiles/BOEM-Fishing%20FAQs.pdf [https://perma.cc/6Q72-DT4K] [hereinafter *Commercial Fishing FAQ*].

131 *Id.*

132 *Id.*

133 *Id.*

134 *See* BUREAU OF OCEAN ENERGY MGMT., U.S. DEP'T OF INTERIOR, EVALUATING THE BENEFITS OF OFFSHORE WIND ENERGY PROJECTS IN NEPA (July 2017), https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/Final-Version-Offshore-Benefits-White-Paper.pdf [https://perma.cc/M7EJ-C4J3].

mitigation measures as a condition of approval of leases.[135] BOEM has "previously removed areas from [leasing] consideration in planning areas because of known fishing activity."[136] BOEM does not have specific criteria for deciding these issues, nor any threshold of activity that would determine an area's status, instead deciding "on a case-by-case basis, balancing site-specific factors and considerations."[137]

While BOEM has jurisdiction and regulatory responsibility over Federal offshore lands related to energy production, BOEM must comply with other federal laws that have a role in offshore operation management.[138] BOEM must complete a detailed environmental review before any major or controversial action under NEPA, comply with air pollutant emissions standards from industrial activities under the Clean Air Act (CAA), and obtain a National Pollutant Discharge and Elimination System permit under the Clean Water Act (CWA).[139] BOEM must also ensure that the federal plans are consistent with state coastal management plans prepared in compliance with CZMA.[140] BOEM must also comply with the Endangered Species Act, MSA, Marine Mammal Protection Act, Migratory Bird Treaty Act, National Historic Preservation Act, and executive orders.[141]

BOEM has established fourteen[142] Intergovernmental Renewable Energy Task Forces (Task Forces) to help inform BOEM's planning and leasing process in states that are interested in developing offshore renewable energy.[143] The Task Forces collect and share information that will be relevant in BOEM's decision-making process and help identify "areas of significant promise for offshore development" and identify potential conflicts as well as steps that can be taken to resolve

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135 *Commercial Fishing FAQ*, *supra* note 130.

136 *Id.*; *See generally* Massachusetts (Nantucket Lightship), Rhode Island (Cox Ledge), and New York (Cholera Bank).

137 *Id.*

138 *BOEM Governing Statutes*, *supra* note 8.

139 *Id.*

140 *Id.*

141 For oil and gas, BOEM must also comply with the Federal Oil and Gas Royalty Management Act of 1982. *Id.*

142 The 14 task forces are in California, Delaware, Florida, Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Rhode Island, South Carolina, and Virginia. *State Activities*, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/renewable-energy/state-activities [https://perma.cc/5KGB-SSXA] (last visited Feb. 11, 2022).

143 BUREAU OF OCEAN ENERGY MGMT., FACT SHEET WIND ENERGY COMMERCIAL LEASING PROCESS (2021), https://www.boem.gov/Commercial-Leasing-Process-Fact-Sheet/ [https://perma.cc/9BWU-RJZX] [hereinafter COMMERCIAL LEASING FACT SHEET].

those conflicts.[144] The Task Forces are for federal-state consultations and include only state government officials, federal agency officials, local government officials, and tribal leaders.[145] Regional Fisheries Management Councils are not included in the task force meetings unless members of the Council are state or federal representatives.[146] Council members can attend the task force meetings and "participate in the question and answer period held at the conclusion of task force meetings."[147]

The renewable energy program has four stages: "(1) planning and analysis, (2) lease issuance, (3) site assessment, and (4) construction and operations."[148] In the first stage, BOEM publishes a call for information and nominations and identifies priority wind energy areas (WEAs) offshore, those locations being ones that "appear most suitable for wind energy development" through "collaborative, consultative, and analytical processes that engage stakeholders, tribes, and State and Federal government agencies."[149] During this stage, BOEM conducts environmental compliance reviews and consults with tribes, states, and agencies.[150] BOEM can also process unsolicited lease applications and may prepare an Environmental Assessment for Lease Issuance and Site Assessment Activities.[151] In the second stage, the leasing process, BOEM determines whether competing interests exist, and if so, BOEM notifies the public and developers of the intent to lease through Sale Notices.[152] If no competing interests exist, BOEM negotiates a lease that may be combined with plan approval.[153] Commercial leases give the lessees exclusive rights to seek approval from BOEM for the development of the lease; this right does not extend to constructing facilities, only the right to use the lease area to develop plans.[154] After approval of the plans, during stage three, the lessee conducts site characterization studies and submits a Site Assessment Plan.[155] The

144 *Id.*
145 *Commercial Fishing FAQ*, *supra* note 130.
146 *Id.*
147 *Id.*
148 COMMERCIAL LEASING FACT SHEET, *supra* note 143.
149 *Id.*
150 *Id.*
151 *Id.*
152 *Id.*
153 *Id.*
154 *Id.*
155 *Id.*

Site Assessment Plan "contains the lessee's detailed proposal for the construction of a meteorological tower and/or . . . meteorological buoys on the leasehold."[156] BOEM then conducts environmental and technical reviews of the Site Assessment Plan and has three options: to approve the plan, to approve the plan with modification, or to disapprove the plan.[157] If the plan is approved, the lessee assesses the site and moves on to stage four, construction and operations.[158] During this stage, the lessee may conduct additional site characterization studies and submit a Construction and Operations Plan, a "detailed plan for the construction and operation of a wind energy project on the lease[,]" which BOEM then reviews; if approved, the lessee then builds the wind facility.[159] After construction and before the end of the lease term, "the developer must submit a plan to decommission facilities."[160]

Since President Biden took office, BOEM has issued a Record of Decision for Vineyard Wind, the first commercial-scale offshore wind project in the United States.[161] The Record of Decision is the final major step in the federal review process.[162] Vineyard Wind will consist of sixty-two turbines off Cape Cod and will meet about ten percent of Massachusetts's power needs.[163] BOEM currently "has 18 active leases for offshore wind farms in the U.S., all of which are on the East Coast and were leased within the last decade."[164] BOEM has also completed its environmental review of the South Fork offshore wind farm and issued a Record of Decision in November 2021.[165] If the project is approved, it will be the second commercial offshore wind project in the

156 *Id.*

157 *Id.*

158 *Id.*

159 *Id.*

160 *Id.*

161 *Vineyard Wind Receives Record of Decision for First in the Nation Commercial Scale Offshore Wind Project*, VINEYARD WIND, https://www.vineyardwind.com/press-releases/2021/5/11/vineyard-wind-receives-record-of-decision [https://perma.cc/SSC7-JC9R] (last visited Feb. 11, 2022).

162 *Id.*

163 Tebor, *supra* note 119.

164 *Id.*

165 Adrijana Buljan, *BOEM Moves South Fork Offshore Wind Farm Closer to Approval*, OFFSHOREWIND.BIZ, (Aug. 17, 2021), https://www.offshorewind.biz/2021/08/17/boem-moves-south-fork-offshore-wind-farm-closer-to-approval/ [https://perma.cc/FAA9-KJ7Q]; BUREAU OF OCEAN MGMT., RECORD OF DECISION: SOUTH FORK WIND FARM AND SOUTH FORK EXPORT CABLE PROJECT CONSTRUCTION AND OPERATION PLAN (2021), https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Record%20of%20Decision%20South%20Fork_0.pdf [https://perma.cc/MD4X-9E7J].

United States.[166] Additionally, BOEM has announced a Notice of Intent to prepare an Environmental Impact Statement for Ocean Wind, which could become the third commercial scale offshore wind project in the United States.[167]

II
SUGGESTIONS TO INCREASE FISHING INDUSTRY PARTICIPATION IN OFFSHORE WIND DEVELOPMENT AND TO BETTER MITIGATE INDUSTRY CONCERNS

Without buy-in from the fishing industry, offshore wind development will likely not reach its potential in the United States. Fishing groups have been instrumental in halting or delaying plans for the development of offshore wind farms.[168] In 2010, the Martha's Vineyard/Dukes County Fishermen's Association (The Association) halted the development of the Cape Wind Energy Project when they filed a lawsuit against the Secretary of the Interior.[169] The Association claimed that the large wind farm, 130 turbines, would put the fishermen permanently out of business.[170] The Association eventually dropped their lawsuit against Cape Wind and reached a settlement agreement where Cape Wind would work with the Association to determine what areas would be open to fishing and "how to make that fishing safe and available to all fishermen."[171] Despite this settlement agreement, Cape

166 The South Fork project still has National Historic Preservation Act and Endangered Species Act requirements that need to be finalized. *Id.*

167 Press Release, The White House, Biden Jumpstarts Offshore Wind Energy Projects to Create Jobs (Mar. 29, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/ [https://perma.cc/PA6S-STCS].

168 *See* The Associated Press, *Fishing Group Seeks Halt to Offshore Wind Development*, WWLP-22NEWS (Apr. 17, 2020, 1:20 PM), https://www.wwlp.com/news/fishing-group-seeks-halt-to-offshore-wind-development/ [https://perma.cc/T49A-BPFM]; Mark Alan Lovewell, *Vineyard Fishermen Sue in U.S. Court to Block Cape Wind Associates*, VINEYARD GAZETTE (July 1, 2010, 6:56 PM), https://vineyardgazette.com/news/2010/07/01/vineyard-fishermen-sue-us-court-block-cape-wind-associates [https://perma.cc/3N3L-T7MR].

169 Lovewell, *supra* note 168.

170 *Id.*

171 Michael Conathan, *Cape Wind Project and Fishermen Seal a Deal*, AM. PROGRESS (June 29, 2012, 9:00 AM), https://www.americanprogress.org/issues/green/news/2012/06/29/11732/fish-on-fridays-cape-wind-project-and-fishermen-seal-a-deal/ [https://perma.cc/N8DW-S8H6].

Wind was never and will never be built after years of litigation and financial and political setbacks.[172]

Since Cape Wind, developers and the federal government have not focused on the fishing industry's concerns. The fishing industry has loudly opposed new offshore wind projects, with hundreds of seafood workers from across the country signing a letter demanding a five-year moratorium on all offshore wind development.[173] BOEM thinks that commercial fisheries will no longer be able to use the 75,614-acre area around Vineyard Wind, as the turbines will be too close together for commercial boats to navigate.[174] While Vineyard Wind has set up a compensation fund for fishermen, the government liaison for Surfside Food Products has said that the fund is not large enough to offset productivity loss.[175] The executive director of the Responsible Offshore Development Alliance, Annie Hawkins, explained: "For the past decade, fishermen have participated in offshore wind meetings whenever they were asked and produced reasonable requests, only to be met with silence" and further explained that the silence shows "a clear indication that those in authority care more about multinational businesses and energy politics than our environment, domestic food sources, or U.S. citizens."[176] If developers want to avoid the issues that plagued Cape Wind, they must get their local fishing industry on board with the proposed development, or the United States may never see commercial-scale offshore wind projects actually be built.

This Article makes five policy suggestions to better incorporate the fishing industry into the development of offshore wind: (1) there should be more significance placed on offshore wind's potential to mitigate the harmful effects of climate change that fisheries face; (2) BOEM should include the impacts of construction in its first assessments; (3) the Fishermen's Contingency Fund should be expanded to include harmful effects to fisheries from offshore renewable energy development; (4) states should include the fishing

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172 Katharine Q. Seelye, *After 16 Years, Hopes for Cape Cod Wind Farm Float Away*, N.Y. TIMES (Dec. 19, 2017), https://www.nytimes.com/2017/12/19/us/offshore-cape-wind-farm.html [https://perma.cc/EQR7-H7UQ].

173 Celina Tebor, *In Renewable Energy Push, Offshore Wind Power Is Key Option*, GOVERNING (Aug. 26, 2021), https://www.governing.com/next/in-renewable-energy-push-offshore-wind-power-is-key-option.

174 Tebor, *supra* note 119.

175 *Id.*

176 Coral Davenport & Lisa Friedman, *Biden Administration Approves Nation's First Major Offshore Wind Farm*, N.Y. TIMES (Oct. 13, 2021), https://www.nytimes.com/2021/05/11/climate/climate-wind-farm.html [https://perma.cc/4765-2CBR].

industry in their coastal management programs that relate to offshore development under the CZMA; and (5) BOEM's Intergovernmental Task Forces should include at least one member from Regional Fishery Management Councils. These suggestions would help mitigate the fishing industry's concerns when it comes to offshore wind development and would create a collaborative effort between the developers and the fishermen.

A. When working with the fishing industry, the focus should be on the potential of offshore wind in mitigating the harmful effects of climate change on the fishing industry.

Offshore wind has the potential to achieve far greater capacity factors than onshore wind and even other forms of energy.[177] A fixed bottom offshore wind farm may have a capacity factor of 45%–60%, and the potential for floating wind farms is even higher.[178] In the winter of 2018, Hywind Scotland, the world's first floating wind farm, produced on average 65% of the max theoretical capacity.[179] On the other hand, onshore wind in the United States averages to about 37% of the max theoretical capacity.[180] As offshore wind becomes more productive, it has the potential to help decrease the United States' reliance on oil and gas, which aligns with President Biden's Climate Policy of meeting the Paris Agreement's Objectives.[181]

Offshore wind can be used to mitigate the impacts of climate change by increasing the use of renewable energy and promoting a move away from nonrenewable energy production, which contributes to climate change. The Director of Government Relations at Mass Audubon,[182]

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177 *Electric Power Monthly*, U.S. ENERGY INFO. ADMIN. (Oct. 24, 2019), https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_6_07_b [https://perma.cc/E6BE-VZ22].

178 *World Class Performances by World's First Floating Wind Farm*, EQUINOR (Feb. 15, 2018), https://www.equinor.com/en/news/15feb2018-world-class-performance.html [https://perma.cc/EZU3-XYDX].

179 *Id.*

180 *See Electric Power Monthly*, *supra* note 177; Matthew Klippenstein, *World's First Floating Offshore Wind Farm Achieves 65% Capacity Factor After 3 Months*, GREEN TECH MEDIA (Mar. 1, 2018), https://www.greentechmedia.com/articles/read/worlds-first-floating-offshore-wind-farm-65-capacity-factor [https://perma.cc/Y85T-MMG2].

181 Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Feb. 1, 2021).

182 Mass Audubon is Massachusetts' largest nature conservation nonprofit, protecting more than 38,000 acres of land throughout Massachusetts. *See About Mass Audubon*, MASS AUDUBON, https://www.massaudubon.org/about-us [https://perma.cc/JDC8-U89K] (last visited Nov. 16, 2019).

Jack Clarke, stated that "the biggest threat to fisheries is not wind farms . . . it's hot water."[183] Nonrenewable energy production is a significant contributor to greenhouse gas emissions and specifically CO_2 emissions in the United States.[184] The ocean absorbs most of the excess heat created by greenhouse gas emissions, and this leads to rising ocean temperatures that affect marine species and ecosystems.[185] As CO_2 in the atmosphere increases, the oceans absorb more and more heat, which contributes to ocean acidification and warming.[186]

One of the big fears the fishing industry has regarding offshore wind development is the lack of studies on the effects offshore wind development has on fisheries. The lack of scientific studies on this topic is not surprising, considering that the United States has a single offshore wind farm with only five turbines off the coast of Block Island, Rhode Island.[187] There are many unknowns about the effects of offshore wind development on fisheries, such as "how the construction of turbines could disrupt commercial fishing operations from navigating around the massive turbines, or the likelihood in shifting fish migration patterns."[188] While studies are still being done at Block Island,[189] the Responsible Offshore Development Alliance announced in April 2019 that it formed an Offshore Wind and Fisheries Research Alliance to "collect and disseminate data on fisheries and wind development and increase understanding of the effects and potential

183 Benjamin Storrow & David Ianconangelo, *Wind Turbines and Fishing Nets Fight for Offshore Space*, E&E NEWS **(**Sept. 6, 2019), https://www.eenews.net/stories/1061111175/print [https://perma.cc/LM8K-QDA6].

184 *Energy and Global Warming*, CTR. FOR BIOLOGICAL DIVERSITY, https://www.biologicaldiversity.org/programs/climate_law_institute/energy_and_global_warming/index.html [https://perma.cc/KX46-EK4L] (last visited Feb. 11, 2022).

185 *Ocean Warming*, INT'L UNION FOR CONSERVATION OF NATURE, https://www.iucn.org/resources/issues-briefs/ocean-warming [https://perma.cc/N778-FQPN] (last visited Feb. 11, 2022).

186 *Ocean Acidification: The Other Carbon Dioxide Problem*, PMEL CARBON PROGRAM, https://www.pmel.noaa.gov/co2/story/Ocean+Acidification [https://perma.cc/WR4N-A3FH] (last visited Feb. 11, 2022).

187 Brendan Cole, *The U.S. Is Finally Getting Its First Offshore Wind Farm*, WIRED (July 28, 2016), https://www.wired.com/2016/07/us-finally-getting-first-offshore-wind-farm/ [https://perma.cc/Y4B4-A483].

188 Dalton, *supra* note 4.

189 *See* Tayla ten Brink, Tracey Dalton & Julia Livermore, *Perceptions of Commercial and Recreational Fishers on the Potential Ecological Impacts of the Block Island Wind Farm (U.S.), the First Offshore Wind Farm in North America* (Dec. 20, 2018), https://www.essoar.org/doi/pdf/10.1002/essoar.10500194.1 [https://perma.cc/XP3D-UA4B].

impacts of wind energy on fisheries and the ocean ecosystems on which they depend."[190]

In order to move past the fear engendered by the lack of studies on the effects of offshore wind development, proponents of offshore wind should focus on the climate science that 1) shows greenhouse gas emissions are related to ocean acidification and ocean warming and 2) fully explains the greenhouse gas mitigation potential for offshore wind. Proponents should also focus on OCSLA provisions that 1) require activities on the Outer Continental Shelf not cause serious harm or damage to life and 2) require additional studies be conducted to establish environmental information and monitor environments for significant changes.[191] While the science may not be fully adequate now, the only way more studies can be conducted is through more development. The fishing industry should have a seat at the table as more development happens, but the industry should not stop the development for lack of science, only for concerns that can be mitigated before development.

B. BOEM should assess the environmental impacts of construction activity in the first Environmental Assessment and Environmental Impact Statement instead of limiting the initial review to preconstruction activity.

In *Fisheries Survival Fund v. Jewell*, fishery interests alleged that BOEM failed to comply with NEPA before issuing a lease off the coast of New York for an offshore wind facility.[192] Under NEPA, an agency must take a "hard look" at environmental consequences to ensure a fully informed, well-considered decision, but as long as the adverse environmental effects of the action are adequately identified, the agency has the discretion to decide that other values outweigh environmental costs.[193] When BOEM published its draft EA for public comment, many of the plaintiffs submitted comments against the proposed lease, contending that the wind facility could harm their

190 Nadja Skopljak, *RODA Launches Offshore Wind and Fisheries Research*, OFFSHOREWIND.BIZ (Apr. 15, 2019), https://www.offshorewind.biz/2019/04/15/roda-launches-offshore-wind-fisheries-research-alliance/ [https://perma.cc/5EPT-7Z97].

191 *See* 43 U.S.C. § 1334(a)(1)(B); 43 U.S.C. § 1334(a)(2)(A)(i); 43 U.S.C. § 1346(a)(1); 43 U.S.C. § 1346(b).

192 Fisheries Survival Fund v. Jewell, 236 F. Supp. 3d 332, 334 (D.C. Cir. 2017).

193 *Id.* at 334–35.

fishing interests and the local marine habitat.[194] BOEM's revised EA resulted in a Finding of No Significant Impact and limited the EA to assessing the environmental impacts of preconstruction activity in the lease area.[195] The plaintiffs were unable to show the irreparable harm needed for a preliminary injunction because the proposed construction would be years away, and other environmental assessments and impact statements would be created before approving construction.[196] Plaintiffs tried to argue that, once the lease was issued, the company would have made a significant financial investment into the development of the wind facility that would alter the balance of harms later in the process.[197] The Court found that the company knew that the proposals may be rejected and it was a possibility the facility would not be built, thus making the harm not imminent.[198]

In an earlier case, *Public Employees for Environmental Responsibility v. Hopper*, the Court found BOEM's EIS for the Cape Wind Energy Project to be inadequate and vacated the statement, requiring BOEM to supplement the EIS with adequate geological surveys.[199] The Court interpreted the hard look requirement under NEPA to require the agencies to not only take a hard look at the environmental effects of the proposal but also the consequences of the action.[200] The Court found that the EIS must "look beyond the decision to offer a lease and consider the predictable consequences of that decision."[201] While the Court vacated the EIS, it did not vacate Cape Wind's lease or other regulatory approvals, in part due to the decade-long process Cape Wind had already been involved in and the costs of delaying construction or requiring the regulatory process to be redone.[202]

In order to comply with Executive Order 13807,[203] BOEM should include an assessment of the consequences of construction when first issuing a lease. The Order works to ensure that the process is "coordinated, predictable, and transparent" and to combat the

194 *Id.* at 335.

195 *Id.*

196 *Id.* at 336–37.

197 *Id.* at 337.

198 *Id.*

199 Pub. Emps. for Env't Resp. v. Hopper, 827 F.3d 1077, 1084 (D.C. Cir. 2016).

200 *Id.* at 1083.

201 *Id.*

202 *Id.* at 1084.

203 Exec. Order No. 13,807, 82 Fed. Reg. 40,463 (Aug. 15, 2017) (establishing discipline and accountability in the environmental review permitting process for infrastructure projects).

inefficiencies in project decisions that delay infrastructure investments and increase costs.[204] The Order has four main policy goals: ensure informed decisions are made concerning environmental impacts;[205] ensure infrastructure[206] is built in an environmentally sensitive manner;[207] conduct environmental reviews in a coordinated, consistent, predictable, and timely manner to give investors the confidence to make funding decisions;[208] and to speak in a coordinated voice when conducting environmental reviews and making authorization decisions.[209] To conform to the policy goals of the Order, BOEM should do an initial assessment of potential construction in the first EA and EIS so that those investing in offshore wind will know if the project will likely happen or be financially feasible. BOEM should also allow the fishing industry to express its concerns at the earliest possible stage to ensure effective and adequate communication. If those in the fishing industry are allowed to express their concerns about the construction early in the process, many of the concerns could be mitigated and all parties involved would be empowered to work through potential issues together.

C. The Fishermen's Contingency Fund should be expanded to include harmful effects to fisheries caused by renewable energy, not just oil and gas.

The Fishermen's Contingency Fund covers property and economic harms to fisheries caused only by obstructions related to oil and gas production.[210] Congress failed to establish a similar fund dedicated to harms to fishery interests caused by offshore renewable energy projects in the Energy Policy Act of 2005.[211] Congress needs to do so now, as the potential for offshore renewable energy projects is growing.[212] If a

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204 *Id.*

205 *Id.*

206 Infrastructure Project is defined as "a project to develop the public and private physical assets that are designed to provide or support services to the general public in the following sectors . . . energy production and generation, including from fossil, renewable, nuclear, and hydro sources; electricity transmission." *Id.* at 40,464.

207 *Id.* at 40,463.

208 *Id.*

209 *Id.*

210 *Commercial Fishing FAQ*, *supra* note 130.

211 *See id.*

212 *Offshore Wind Market Projections Indicate Accelerated Growth Over Next Decade*, NAT'L RENEWABLE ENERGY LAB'Y (Aug. 15, 2019), https://www.nrel.gov/news/program

similar fund was created for any negative effects to the fishing industry related to offshore renewable energy projects, fishery interests may be less cautious about offshore projects. As it is now, there is no guarantee that offshore renewable energy projects will not harm fisheries, and the industry cannot risk supporting projects that may help mitigate the harmful effects of climate change if they have to risk damaging the fisheries even further. If Congress created a contingency fund as a type of insurance to the fishing industries, the fishing industry would likely be less vehemently opposed to offshore wind projects.

D. States should include fishery interests in their Coastal Management Plans under CZMA when it comes to development on the Outer Continental Shelf.

Under the Coastal Zone Management Act, states have the ability to create coastal zone management programs that are approved by the Secretary of Commerce.[213] The state can control development to ensure compliance with the management program,[214] and all federal agency actions must[215] be consistent with the management plan.[216] In the management plans, states have the ability to incorporate fishery protection while promoting offshore wind development,[217] and states can ensure that the fishing industry is included in the planning and development process. One example of a state using its coastal management program to incorporate fishery interests in the development of offshore renewable energy is Rhode Island's Coastal Resources Management Program (RICRMP).[218] RICRMP includes an Ocean Special Area Management Plan (SAMP) and has a Renewable Energy Chapter that focuses on offshore wind because offshore wind

/2019/offshore-projections-indicate-accelerated-growth.html [https://perma.cc/GC32-KDZB].

213 16 U.S.C. § 1454.

214 *Id.* § 1455(d)(10)(A).

215 Exceptions: The President can exempt an inconsistent federal action if it is in the paramount interest of the United States, and Federal agencies can proceed with inconsistent projects if they are consistent with the purposes of the CZMA or it is necessary for national security. *See Id.* § 1456(c)(1)(B), (d).

216 *Id.* § 1456(c)(1)(A).

217 *Coastal Zone Management Programs*, NAT'L OCEANIC & ATMOSPHERIC ADMIN., https://coast.noaa.gov/czm/mystate/ [https://perma.cc/QB2F-GB39] (last visited Feb. 11, 2022).

218 *See generally* 650-8 R.I. CODE R. § 8.1–8.5 (2019).

represents the greatest potential for utility-scale offshore renewable energy.[219]

The beginning of the chapter focuses on studies that have been conducted in Europe on potential effects, both negative and beneficial, that offshore wind development may have on the communities.[220] The second half of the chapter is Rhode Island's general policies and regulatory standards for offshore development.[221] The standards begin with Rhode Island's SAMP goals, which are to (1) "[f]oster a properly functioning ecosystem that can be both ecologically effective and economically beneficial"; (2) "[p]romote and enhance existing uses"; and (3) to encourage economic development that both "considers the aspirations of local communities and is consistent and complementary to the state's overall economic development needs and goals."[222] SAMP supports increasing offshore renewable energy production in part because it "is a means of mitigating the potential effects of global climate change" and will diversify Rhode Island's energy portfolio while meeting the renewable energy standard goals.[223]

SAMP Policies and Regulatory Standards focus on including fishery interests in the entirety of the approval and development process for offshore renewables and give the Coastal Resources Management Council (the Council) significant discretion when approving applications and during the development process.[224] The Council may require applicants for offshore development "to fund a program to mitigate the potential impacts of a proposed offshore development to natural resources and existing human uses"[225] and reviews the leaseholder's performance bond[226] every three years to ensure the amount is still sufficient for its stated purpose.[227] Mitigation is "defined as a process to make whole those fisheries user groups that are adversely affected by proposals to be undertaken or undertaken projects in the Ocean SAMP area" and must be consistent with the purposes of fishery management plans, programs, strategies, and

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219 *Id.*

220 *See generally id.* § 8.4.3–8.4.8.

221 *See id.* § 8.5.

222 *Id.* § 8.5.1(A).

223 *Id.* § 8.5.1(B)(1)–(3).

224 *See generally id.* § 8.5.

225 *Id.* § 8.5.1(E).

226 The lease holder must post a performance bond sufficient to ensure removal of all structures at the end of the lease and to restore the site.

227 *Id.* § 8.5.2 (H)(2).

regulations.[228] Mitigation can include "compensation, effort reduction, habitat preservation, restoration and construction, marketing, and infrastructure improvements," and when potential impacts are associated with projects, mitigation will be presumed.[229] Negotiation of mitigation agreements is a necessary condition of any approval of a project and includes fishery interests, and the costs associated with the negotiations are borne by the permit applicant.[230] The Council also works with federal agencies to allow for commercial and recreational fishing and boating "access around and through offshore structures and developments and along cable routes" to mitigate the potential adverse impacts of offshore structures.[231] The Council reserves authority to have federal agencies inform it if federal actions may restrict vessel access and can review changes affecting existing navigational activities to ensure that they are following CZMA federal consistency review standards.[232]

SAMP designates areas of the Rhode Island coast that the Council found most suitable for offshore renewable energy development and also designates areas for preservation that cannot support offshore renewable energy development.[233] The plan included Areas of Particular Concern, which are areas that are protected because they have "high conservation value, cultural and historic value, or human use value from large-scale offshore development"[234] and include areas with high fishing activity.[235] The Council retains permitting and enforcement authorities to require applicants to modify proposals to avoid or mitigate adverse impacts and to deny proposals throughout the preconstruction, construction, operation, and decommissioning phases of a project.[236] The Council has these powers to ensure that offshore development will "not have a significant adverse impact on the natural resources or existing human uses of the . . . coastal zone" and it determines if the development has an overall net benefit to the marine economic sector or if the development has an overall net loss.[237] The

228 *Id.* § 8.5.2(8).

229 *Id.*

230 *Id.*

231 *Id.* § 8.5.1(I).

232 *Id.*

233 *Id.* § 8.5.2(2) (Figure 8.47 shows the Renewable Energy Zone, which is located around Block Island).

234 *Id.* § 8.5.2(C)(1).

235 *Id.* § 8.5.2(C)(1)(f).

236 *Id.* § 8.5.2(3).

237 *Id.*

plan requires that "any large-scale offshore development shall require a meeting between the Fisherman's Advisory Board [FAB], the applicant, and the Council staff to discuss potential fishery-related impacts."[238] The plan requires that all potential adverse impacts on both commercial and recreational fisheries be "evaluated, considered, and mitigated,"[239] and the Council must prohibit any uses or activities that would "result in significant long-term[240] negative impacts to Rhode Island's commercial or recreational fisheries."[241]

The Council works with FAB extensively during preconstruction and if the Council determines that there is a significant conflict with fishing activities that are season-limited during construction or marine dredging activities, the Council modifies or denies the activities to minimize conflict with the fishery uses.[242] The Council requires the permit holder to communicate with the members of the fishing industry during construction or dredging activities, and the communication is facilitated through a project-specific website.[243] The Council also requires the permit holder to designate and fund a third-party fisheries liaison who will be available to the fishing industry throughout all stages of the offshore development and who is "knowledgeable about fisheries and shall facilitate direct communication between commercial and recreational fishermen and the project developer."[244]

Rhode Island's plan is extensive and ensures that fishery concerns are adequately acknowledged and mitigated and uses studies from active offshore wind farms in Europe to fully understand all possible impacts of offshore development, both beneficial and negative.[245] Rhode Island's plan ensures that fishery interests will be heard throughout the process, and the plan protects the robust economy that the fishing industry provides the state. All coastal states should do as

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238 *Id.* § 8.5.2(5).

239 *Id.* § 8.5.2(7).

240 "Long-term impacts are defined as those that affect more than one or two seasons." *Id.*

241 *Id.* § 8.5.2(6).

242 *Id.* § 8.5.2(H)(4).

243 *Id.* § 8.5.2(H)(5).

244 *Id.* § 8.5.2(H)(6).

245 *See* JENNIFER MCCANN & SARAH SCHUMANN, THE RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN: MANAGING OCEAN RESOURCES THROUGH COASTAL AND MARINE SPATIAL PLANNING, A PRACTITIONER'S GUIDE 49 (Monica Allard-Cox ed., 2013), http://www.crmc.ri.gov/samp_ocean/reports/Ocean_SAMP_Practioners_Guide.pdf [https://perma.cc/K8SX-4ATS].

much or more for the fishing community as Rhode Island has done when promoting offshore wind energy. If states use their CZMA-approved coastal management programs to ensure that fishery interests will be adequately considered throughout the offshore development process, the fishing industry will likely be more supportive of offshore wind development. Every state will have different fishery interests to protect based on their local industries, but they should all require project developers to mitigate negative impacts and allow the fishing industry to be a part of the entire process, from permit submissions to decommissioning.

E. BOEM's Intergovernmental Renewable Task Forces should include at least one member from the Regional Fishery Management Councils.

MSA created eight regional fishery management councils[246] to manage marine fishery resources seaward of state waters.[247] The Councils represent commercial and recreational fishing sectors and environmental, academic, and government interests.[248] The Secretary of Commerce is required to appoint voting members to the Councils and the Secretary looks for candidates who are "knowledgeable in fishery conservation and management, or the commercial and recreational harvest of fishery resources through occupational experience, scientific expertise, or related training."[249] The Council system creates an "unprecedented management system [that] gives fishery managers the flexibility to use local level input to develop management strategies appropriate for each region's unique fisheries, challenges, and opportunities."[250] The system allows for regional, participatory governance by people who are knowledgeable and have a stake in the fishery's management.[251] The Councils develop

246 The eight Councils are New England, Mid-Atlantic, South Atlantic, Caribbean, Gulf of Mexico, Pacific, Western Pacific, and North Pacific. U.S. REG'L FISHERY MGMT. COUNCILS, http://www.fisherycouncils.org/ [https://perma.cc/CJ3K-UR5N] (last visited Feb. 11, 2022).

247 *Id.*

248 *Regional Fishery Management Councils*, NAT'L OCEANIC & ATMOSPHERIC ASS'N, https://www.fisheries.noaa.gov/topic/partners#regional-fishery-management-councils [https://perma.cc/8JZN-8XHY] (last visited Feb. 11, 2022).

249 *Council Nominations and Appointments*, NAT'L OCEANIC & ATMOSPHERIC ASS'N, https://www.fisheries.noaa.gov/national/partners/council-nominations-and-appointments [https://perma.cc/KCQ5-SYTQ] (last visited Feb. 11, 2022).

250 U.S. REG'L FISHERY MGMT. COUNCILS, *supra* note 246.

251 *Id.*

management plans in a "fully transparent and public process" basing the measures on sound scientific advice.[252]

BOEM's fourteen Intergovernmental Renewable Task Forces do not include members of the Councils unless those members are state or Federal entity representatives.[253] Fishery interests would feel better represented in the offshore renewable energy planning process if members of the Council were part of the Task Forces. BOEM could easily do this if they opened up at least one seat on the task force to a Council representative from the given state. The Councils have a fully transparent and public process for developing management plans, and the Councils work closely with local fishing communities to manage fisheries. This knowledge and expertise would make a Council member invaluable on the Task Force and ensure that fishery concerns are being heard and the science available is being used. Fishery interests are included in regional stakeholder workshops meant to reduce conflict between fishermen and wind energy developers,[254] but the fishing industry should be a part of the entire process. If a Council member had a seat on the Task Force, that presence would likely reduce conflict between the fishing industry and energy development and likely reduce the potential for litigation.

CONCLUSION

The potential for offshore wind development in the United States under the Biden Administration is great, and in order to move forward with more development, the fishing industry must be included in the development process. The fishing industry must be included from the preconstruction phase to the decommissioning phase, and development must be located in areas that will not harm the fishing industry in any significant way. To better include the fishing industry and mitigate the industry's concerns, at least five things should be done: (1) there should be more significance placed on offshore wind's potential to mitigate the harmful effects of climate change that fisheries face; (2) BOEM should include the impacts of construction in its first assessments; (3) the Fishermen's Contingency Fund should be expanded

252 *Id.*

253 *Commercial Fishing FAQ*, *supra* note 130.

254 Memorandum from Peggy Farrell, Ecology and Environment, Inc. to Brian Hooker, Bureau of Ocean Energy Mgmt. (Nov. 16, 2012), https://web.archive.org/web/20190815211639/https://www.boem.gov/uploadedFiles/RI%20Nov%2016_Meeting_Minutes_FINAL%20121412.pdf [https://perma.cc/Q5LV-QB3A].

to include harmful effects to fisheries from offshore renewable energy development; (4) states should include the fishing industry in their coastal management programs that relate to offshore development under the CZMA; and (5) BOEM's Intergovernmental Task Forces should include at least one member from Regional Fishery Management Councils. Taking these five steps would likely lead to greater approval of offshore wind development from the fishing industry, and the two industries would have less conflict.