In the

Supreme Court of the United States

NANTUCKET RESIDENTS AGAINST TURBINES AND VALLORIE OLIVER,

Petitioners,

v.

UNITED STATES,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

In March 2021, the administration announced its plan of "bold actions" to catalyze the development of offshore wind energy by taking "coordinated steps to support rapid offshore wind development." But the federal government has lost sight of its statutory obligations to conserve endangered species that will be directly affected by the construction of thousands of wind turbines in the Atlantic Ocean.

The Endangered Species Act imposes an affirmative duty on all federal agencies to ensure that their actions are not likely to jeopardize the continued existence of a species, using the best scientific data available. Excluding the effects of other planned governmental actions violates the best available science requirement.

The question presented is whether federal agencies can, consistent with the plain language of the Endangered Species Act, exclude from their Section 7 analysis known and available science regarding impacts on an endangered species resulting from federal actions.

^{1.} The White House, Fact Sheet: Biden Administration 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/.

^{2.} See 16 U.S.C. § 1536; see also 50 C.F.R. § 402.14(g)(8).

PARTIES TO THE PROCEEDINGS

Petitioners, Nantucket Residents Against Turbines and Vallorie Oliver, were plaintiffs-appellants in the First Circuit. Respondents, the United States, acting through the U.S. Bureau of Ocean Energy Management, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Debra Haaland, Secretary of the Interior, Gina M. Raimondo, Secretary of Commerce, and Vineyard Wind 1, LLC, were defendant-appellees in the court below.

CORPORATE DISCLOSURE

Nantucket Residents Against Turbines is a 501(c)(3) non-profit, non-governmental corporation. It has no parent corporation and no publicly held company owns 10% or more of its stock.

STATEMENT OF RELATED CASES

Nantucket Residents Against Turbines, et al. v. U.S. Bureau of Ocean Energy Management, No. 23-1501, U.S. Court of Appeals for the First Circuit. Judgment Entered April 24, 2024. Nantucket Residents Against Turbines, et al. v. U.S. Bureau of Ocean Energy Management, No. 1:21-cv-11390-IT, U.S. District Court for the District of Massachusetts. Judgment Entered May 17, 2023.

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PETITION FOR A WRIT OF CERTIORARI

The approximately 50-square-mile island of Nantucket, located in the southeastern part of Massachusetts, is a charming, slow-paced community with historic structures and areas. Over the objections of Nantucket residents, the federal government approved the siting of the nation's first offshore wind turbine project, Vineyard Wind 1, fifteen miles offshore of Nantucket.³ The project owners are Avangrid (part of Iberdrola Group) and Copenhagen Infrastructure Partners, which are operating through Vineyard Wind LLC—the company constructing Vineyard Wind 1 and overseeing operations.

The Vineyard Wind 1 Project is the first of the government's "coordinated steps" to construct about 30 wind turbine projects along the Atlantic seaboard that, when built out, will have thousands of turbines covering millions of acres of federal submerged lands. Vineyard Wind LLC has constructed, or partially constructed, 47 of the 62 approved wind turbines, with each turbine spaced one nautical mile apart. Once fully constructed, each

^{3.} See Bureau of Ocean Energy Management, Vineyard Wind Record of Decision (May 10, 2021), www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Final-Record-of-Decision-Vineyard-Wind-1.pdf.

^{4.} The White House, Fact Sheet: Biden Administration 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/; see generally Dept. of Energy, Advancing Offshore Wind Energy in the United States (Mar. 29, 2023), https://www.energy.gov/sites/default/files/2023-03/advancing-offshore-wind-energy-full-report.pdf.

turbine stands 853 feet above the water and is almost three times the size of the Statue of Liberty. The 47 turbines have already begun to adversely impact the Nantucket community, the ocean environment, and marine species' habitat. Although not considered in any environmental impact analyses, problems with the turbines have also already begun. In July 2024, a large portion of a 350-foot fiberglass and PVC blade broke off one of Vineyard Wind's turbines into the water, and pieces of the blade washed ashore and littered the beaches of Nantucket.⁵

Despite the agencies' explicit statutory duty to consider all "best information available," regarding the impacts its actions might have on an endangered or threatened species and those habitats, the National Marine Fisheries Service (NMFS) and the Bureau of Ocean Energy Management (BOEM), did not consider the cumulative impacts of other planned projects when they authorized and issued permits to construct the Vineyard Wind 1 Project.

At the time of the Vineyard Wind 1 Biological Opinion, BOEM had issued over 25 offshore wind leases (on which one or more projects will be built), yet in the Biological Opinion, NMFS openly stated that it did not consider the cumulative impacts of those projects.⁷

^{5.} See Matt Schooley, Vineyard Wind Shut Down After Turbine Failure Sends "Sharp Fiberglass Shards" Onto Nantucket Beaches, CBS News (July 17, 2024), https://www.cbsnews.com/boston/news/nantucket-beaches-closed-vineyard-wind/.

^{6.} Conner v. Burford, 848 F.2d 1441, 1454 (9th Cir. 1988).

^{7.} National Marine Fisheries Service, Endangered Species Act Section 7 Consultation Biological Opinion (Oct. 18, 2021)

Due to overharvesting in the 19th century, the North Atlantic Right Whale is among the most imperiled species on the planet,⁸ and "progress toward [R]ight [W]hale recovery ha[s] regressed." The North Atlantic Right Whale has been on the brink of extinction for more than a hundred years and was among the first species to be listed as endangered. The current number of North Atlantic Right Whales has dwindled to 338.11

The North Atlantic Right Whale will bear the brunt of the federal government's shortcutting of the environmental review process. As reported by NMFS:

at 143, https://www.boem.gov/sites/default/files/documents/renewable-energy/2021-Vineyard-Wind-1-BiOp-Final_0.pdf (2021 Biological Opinion).

^{8.} See Bureau of Ocean Energy Management, BOEM and NOAA Fisheries North Atlantic Right Whale and Offshore Wind Strategy (Jan. 2024) at 8, https://www.boem.gov/sites/default/files/documents/environment/BOEM_NMFS_NARW_OSW_0.pdf (Strategy on the North Atlantic Right Whale) ("The species faces a high risk of extinction, and the population size is small enough that the death of even very few individuals can have a measurable effect on its population status, trend, and dynamics. Furthermore, the loss of even one individual a year . . . may reduce the likelihood of species recovery. . . .").

^{9.} See 2021 Biological Opinion supra note 7 at 67.

^{10.} See National Oceanic and Atmospheric Administration, *North Atlantic Right Whale*, https://www.fisheries.noaa.gov/species/north-atlantic-right-whale (last visited Sept. 16, 2024)

^{11.} National Marine Fisheries Service, *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments 2022* (June 2023) at 2, https://media.fisheries.noaa.gov/2023-08/Final-Atlantic-and-Gulf-of-Mexico-SAR.pdf.

Right [W]hales have typically appeared in Cape Cod Bay during spring, but in recent years have been arriving sooner and staying longer. Right [W]hale use of areas south and west of Nantucket Shoals has been documented in just the last 10 years. In recent years, the [R]ight [W]hales appear to be staying in these waters in greater numbers and for longer periods than in the past.¹²

Despite the obvious effects that constructing wind turbines all along the North Atlantic Right Whale's migratory route and now year-round habitat will have, ¹³ the agencies evaluated only the impacts caused by the Project itself and ignored obvious impacts from all the other projects planned in the Atlantic Ocean.

The decision below affirming the district court's wholesale approval of the federal agencies' incomplete Section 7 analysis directly conflicts with decisions of the Ninth Circuit, rejecting the agency's piecemeal analysis of environmental impacts on a species, and the D.C. Circuit, rejecting the First Circuit's deference to the agency's determination of what the ESA requires. Review by this Court to reverse the agencies' failure to consider all known environmental impacts on the Right Whale as

^{12.} National Oceanic and Atmospheric Administration Fisheries, North Atlantic Right Whales on the Move in the Northeast (Apr. 15, 2021), https://www.fisheries.noaa.gov/feature-story/north-atlantic-right-whales-move-northeast#:~:text=Right%20 whales%20have%20typically%20appeared,just%20the%20 last%2010%20years.

^{13.} See Strategy on the North Atlantic Right Whale supra note 8 at 10.

explicitly required by Section 7 of the federal Endangered Species Act and to resolve the conflict among the circuits is warranted.

Petitioners, Nantucket Residents Against Turbines and Vallorie Oliver, respectfully petition this Court for a writ of certiorari to review the judgment of the United States Court of Appeals for the First Circuit.

OPINIONS BELOW

The opinion of the United States Court of Appeals for the First Circuit is reported as *Nantucket Residents Against Turbines v. U.S. Bureau of Ocean Energy Mgmt.*, 100 F.4th 1 (1st Cir. 2024) (Pet. App. 1a), decided on April 24, 2024, and reproduced in the appendix hereto ("Pet. App.") at 1a. The opinion of the District Court for the District of Massachusetts is reported at 675 F. Supp. 3d 28 (D. Mass. 2023), and is reproduced at Pet. App. 33a.

JURISDICTION

The judgment of the First Circuit was entered on April 24, 2024. Pet. App. 1a. On July 17, 2024, Justice Jackson, extended the time for filing a petition for certiorari to and including September 23, 2024. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTORY AND REGULATORY PROVISIONS INVOLVED

The relevant provisions of the Endangered Species Act,¹⁴ are reproduced at Pet. App. 103a.

^{14. 16} U.S.C. §§ 1531-1544.

STATEMENT OF THE CASE

I. Statutory and Regulatory Framework

1. Endangered Species Act

Congress enacted the Endangered Species Act (ESA) in 1973 "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved . . . [and] to provide a program for the conservation of such endangered species and threatened species." Section 7 of the ESA requires that:

Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded or carried out by such agency... is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species.... ¹⁶

During the consultation, NMFS must "[f]ormulate [its biological] opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat." Upon completion of the Section 7 consultation, the agency must set forth its analysis in a Biological Opinion, including the agency's determination of whether there is

^{15. 16} U.S.C. § 1531(b).

^{16. 16} U.S.C. § 1536(a)(2).

^{17. 50} C.F.R. § 402.14(g)(4).

"jeopardy" to the species and what measures the agency must take to avoid jeopardy, 18 using the "best scientific and commercial data available." 19

The National Marine Fisheries Service's (NMFS) regulatory interpretation of Section 7 erroneously allows it to carve out or exclude from its Section 7 cumulative analysis a subset of the government's coordinated plan to develop wind turbine projects because those projects have not yet undergone Section 7 consultation. ²⁰ As NMFS states in its Biological Opinion for the Vineyard Wind 1 Project:

"Cumulative effects" are those effects of future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 C.F.R. §402.02). Future Federal actions that not part of the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. It is important to note that the ESA definition of cumulative effects is not equivalent to the definition of "cumulative impacts" under the National Environmental Policy Act (NEPA). As noted in Appendix A of the SETS, "Cumulative impacts are the incremental effects of the Proposed Action on the environment when

^{18. 16} U.S.C. § 1536(b); 50 C.F.R. § 402.14(h).

^{19.} Oceana, Inc. v. Pritzker, 75 F. Supp. 3d 469, 475 (D.D.C. 2014) (quoting 16 U.S.C. § 1536(a)(2)).

^{20. 50} C.F.R. § 402.02 (defining "cumulative effects").

added to other past, present, or reasonably foreseeable actions taking place within the region of the proposed Project, regardless of which agency or person undertakes the actions."²¹

NMFS's regulatory carve-out directly conflicts with the ESA, which commands NMFS to use the best available science to evaluate the impacts of federal actions on an endangered species.

The First Circuit's decision, which upholds NMFS' truncated Section 7 analysis, directly conflicts with several decisions issued by the Ninth Circuit, including an important decision that invalidated a Biological Opinion for failure to consider all known effects of a future oil and gas leasing project: "With the information available, the [federal agency] could also have identified potential conflicts between the protected species and post-leasing activities....[I]t is critical that ESA review occur early in the process to avoid piecemeal chipping away of habitat."²²

^{21. 2021} Biological Opinion supra note 7 at 329 (internal quotations omitted).

^{22.} Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988); see also Nat. Res. Def. Council v. Haaland, 102 F.4th 1045, 1069–70 (9th Cir. 2024) (holding that agency must make a meaningful determination of a project's impacts by looking beyond the immediate project).

2. Energy Policy Act of 2005

Congress passed the Energy Policy Act of 2005 to allow the Minerals Management Service, an agency within the Department of Interior (now the Bureau of Ocean Energy Management or BOEM), to grant leases for offshore renewable energy projects. ²³ The Act provided that, because offshore wind development "will have significant impacts on coastal and non-coastal areas of the coastal States," ²⁴ all offshore development must be "subject to environmental safeguards."

In March 2021, the administration identified a series of "bold actions" to "catalyze offshore wind energy" development.²⁶ The White House stated its goal of deploying 30 gigawatts of offshore wind energy by 2030 and announced that it was taking "coordinated steps to support rapid offshore wind deployment."²⁷ To meet the 2030 target, the administration announced that it planned to advance new lease sales and complete review of "at least 16 Construction and Operations Plans (COPs) by 2025."²⁸

^{23.} Energy Policy Act of 2005, Pub. L. No. 109-58 (2005).

^{24.} Id.

^{25.} Id.

^{26.} Biden Administration, Fact Sheet: Biden Administration 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/.

^{27.} Id.

^{28.} Id.

As of today, 30 offshore wind projects are in various stages of development, all of which will be located in, along, or very near the endangered North Atlantic Right Whale's migration path and habitat.²⁹

3. Section 7 of the Endangered Species Act Requires Agencies to Consider All Known and Best Available Science to Avoid Adverse Impacts on Listed Species

Under Section 7 of the federal Endangered Species Act, BOEM must consult with NMFS before taking any action that may jeopardize endangered species, including the North Atlantic Right Whale.³⁰

When the Biological Opinion was prepared for the Vineyard Wind 1 Project, BOEM and NMFS were already in the process of preparing an analysis of the threats posed by wind turbine construction on the continued existence of the Right Whale. In October 2022, BOEM and NMFS authored and sent for comment a draft *North Atlantic Right Whale and Offshore Wind Strategy*, in which they recognize that wind turbine development (from siting to decommissioning) must be undertaken responsibly, including managing and mitigating the impacts on the endangered North Atlantic Right Whale and that the agencies must take precautions to ensure that offshore wind development "is carried out in a way that minimizes the potential for adverse effects to the species and the ecosystems on which it depends." "

 $^{29.\} See$ Strategy on the North Atlantic Right Whale supra note 8 at 5.

^{30. 16} U.S.C. § 1536(a).

^{31.} See Bureau of Ocean Energy Management, Draft BOEM and NOAA Fisheries North Atlantic Right Whale and Offshore

BOEM and NMFS published the final Strategy in January 2024. 32

The Strategy identifies "30 renewable energy lease areas in the Atlantic Outer Continental Shelf" and notes that the North Atlantic Right Whale has a "range [that] overlaps with the area proposed for [offshore wind] development..." The agencies acknowledge that "[t]he activities associated with [offshore wind] development would introduce or further contribute to existing stressors in the environment that affect [North Atlantic Right Whales]." These stressors include "exposure to noise and/or pressure (particularly from construction activities)," resulting in "hearing impairment, masking of [North Atlantic Right Whale] vocal communication, physiological impacts (e.g., stress), and/or behavioral disturbance, as well as mortality and injury..."

The agencies urged caution in authorizing offshore wind projects because

[d]ue to the declining status of [North Atlantic Right Whales], the resilience of this population

Wind Strategy (Oct. 2022) at 1, https://www.regulations.gov/docket/BOEM-2022-0066/document.

^{32.} See generally Strategy on the North Atlantic Right Whale supra note 8.

^{33.} Id. at 5.

^{34.} Id.

^{35.} Id. at 12.

^{36.} Id.

^{37.} *Id*.

to stressors affecting their distribution, abundance, and reproductive potential is low. The species faces a high risk of extinction, and the population size is small enough that the death of even very few individuals can have a measurable effect on its population status, trend, and dynamics. Furthermore, the loss of even one individual a year . . . may reduce the likelihood of species recovery and of their ability to achieve optimum sustainable population.³⁸

When NMFS issued the operative Biological Opinion for the Vineyard Wind 1 Project on October 18, 2021, it failed to consider the impacts of any offshore wind facility as part of its cumulative effects review and only considered three projects, totaling 19 turbines, as part of its environmental baseline: the South Fork Project (12 turbines), the Coastal Virginia Pilot Project (2 turbines), and the (state-constructed) Block Island Project (5 turbines).³⁹

Even under NMFS' truncated cumulative effects definition and analysis, NMFS still should have considered the impacts of an additional 316 turbines as part of the environmental baseline because of how far along those projects were in the approval process: Revolution Wind, Sunrise Wind, Kitty Hawk, and Ocean Wind 1. NMFS excluded these projects from any consideration for the sole reason that the official Section 7 consultation was not underway or complete.⁴⁰ To satisfy the ESA's

^{38.} Id. at 8.

^{39. 2021} Biological Opinion supra note 7 at 143, 287.

^{40.} Id. at 143.

requirements, NMFS should have considered the impacts of all projects as part of the administration's "coordinated" steps to achieve renewable wind energy.

Notably, all of these planned projects will sit along the migration path of the North Atlantic Right Whale, as BOEM and NMFS are fully aware. In their Joint Strategy to protect the Right Whales, the agencies stated that these whales are "migrating along the U.S. Atlantic Coast [and] have the potential to travel near or through many currently proposed [offshore wind] developments along the Atlantic Coast." The offshore wind projects that were planned and were known to the agencies will be built "in areas that are important for [North Atlantic Right Whale] vital functions."

REASONS FOR GRANTING THE PETITION

The federal government is approving the construction of thousands of massive wind turbine structures on the floor of the Atlantic Ocean offshore numerous communities, such as Nantucket, Massachusetts, at a blistering pace. These metal monopiles, known as "wind turbines," are being anchored to the ocean floor by thousands of tons of rock and concrete to provide them support. These wind turbines are being sited directly in the migration path of the nearly extinct North Atlantic Right Whale.

^{41.} Id. at 14.

^{42.} Id.

^{43.} See 2021 Biological Opinion supra note 7 at 15–16.

^{44.} See Strategy on the North Atlantic Right Whale supra note 8 at 10.

The federal government's planned and coordinated offshore wind energy corridor, and the approved and now partially constructed Vineyard Wind 1 Project off the coast of Nantucket, Massachusetts, means that the 70 remaining breeding female Right Whales will have to navigate through thousands of offshore wind turbine projects to maintain reproductive integrity and survive as a species. That the same federal agencies charged with protecting our nation's fragile endangered species and their habitat could construe the Endangered Species Act to mean that they could ignore the cumulative impacts of the other planned wind turbine projects—limiting its analysis to only the project under consideration—defeats the purpose of the ESA.

Yet NMFS—under its own regulation, which misinterprets the ESA to let the agency carve out a portion of known impacts—ignored the cumulative impacts of the government's coordinated plan to construct many wind turbine projects in the Atlantic Ocean. NMFS instead issued its Biological Opinion limiting its analysis to only the Vineyard Wind 1 Project's impacts on the Right Whale.⁴⁵

The First Circuit erroneously rejected this crucially important challenge to the agencies' failure to comply with the Endangered Species Act in approving the first of thousands of wind turbines that will forever change the ocean floor and affect hundreds of fish species, migratory bird species, and perhaps render the final blow to the North Atlantic Right Whale.

^{45.} See 2021 Biological Opinion supra note 7 at 142-43.

1. The First Circuit's Decision Conflicts with the Plain Language of the Endangered Species Act

The Endangered Species Act required NMFS and BOEM to determine if the government's actions will jeopardize the Right Whale and then make recommendations in its Biological Opinion regarding how to avoid jeopardizing the whale species using the "best scientific and commercial data available." But instead of analyzing all of the best information available, NMFS intentionally chose to exclude from its analysis the effects that the over two dozen offshore wind projects along the Right Whale's annual migration path, in various stages of approval, will have on the remaining 338 members of this nearly extinct whale species, directly contrary to the ESA. By doing so, the Biological Opinion underreports the specific and cumulative impacts of the Vineyard Wind 1 Project on the North Atlantic Right Whale.

A report jointly prepared by BOEM and NMFS warns of the precarious status of the Right Whale, where losing one individual may doom the species:

Due to the declining status of [North Atlantic Right Whales], the resilience of this population to stressors affecting their distribution, abundance, and reproductive potential is low. The species faces a high risk of extinction, and the population size is small enough that the death of even very few individuals can have a measurable effect on its population status,

^{46. 16} U.S.C. § 1533.

^{47.} Ctr. for Biological Diversity v. Regan, No. CV 21-119 (RDM), 2024 WL 1602457 (D.D.C. Apr. 12, 2024).

trend, and dynamics. Furthermore, the loss of even one individual a year . . . may reduce the likelihood of species recovery and of their ability to achieve optimum sustainable population.⁴⁸

Yet, as the Vineyard Wind Biological Opinion frankly admits, NMFS ignored and did not analyze how other offshore wind projects now on the drawing board along the North Atlantic Right Whale's annual migration route will affect the species, taking the position that "other [future] offshore wind energy development activities," including construction of thousands of giant turbines on millions of acres of ocean bed, could be ignored because "they would require at least one Federal authorization or permit and would, therefore require their own ESA section 7 consultation requirements." But nothing in the ESA authorizes federal agencies to ignore known threats to endangered species just because the activity will require its own biological opinion in the future. 51

The agencies were fully aware of the likelihood that Vineyard Wind was only a small segment of the much larger, coordinated offshore wind development program swiftly gaining government approval in other planned projects underway, as the Biological Opinion reveals:

^{48.} See Strategy on the North Atlantic Right Whale supra note 8 at 8.

^{49.} See 2021 Biological Opinion supra note 7 at 329.

^{50.} Id.

^{51.} See N. Slope Borough v. Andrus, 642 F.2d 589 (D.C. Cir. 1980) ("action" must be construed broadly).

BOEM presented a cumulative activities scenario that identified the possible extent of reasonably foreseeable offshore wind development on the Atlantic OCS [Outer Continental Shelf]. As a result of this process, BOEM has assumed that approximately 22 gigawatts of Atlantic offshore wind development are reasonably foreseeable along the east coast. As defined by BOEM in the SEIS, reasonably foreseeable development includes 17 active wind energy lease areas (16 commercial and 1 research). The level of development expected to fulfill 22 gigawatts of offshore wind energy would result in the construction of about 2,000 wind turbines over a 10-year period on the Atlantic OCS, with currently available technology.⁵²

But the agencies ignored these anticipated thousands of giant wind turbines to be built along the East Coast because, according to NMFS, "any future offshore wind project will require section 7 consultation, these future wind projects do not fit within the ESA definition of cumulative effects and none of them are considered in this [Biological] Opinion."⁵³

Petitioners pointed this out to the First Circuit in their opening brief, which stated that a 2021 Quintana-Rizzo study has the "best available scientific data" that NMFS and BOEM ignored in preparing the Biological Opinion, including discussions of recent shifts in Right Whale

 $^{52.\} See\ 2021$ Biological Opinion supra note 7 at 330.

^{53.} Id.

distribution: "[E]normous development [of offshore wind projects] could have a local impact on right whales at a critical time when they are becoming more reliant on the region."54 Petitioners also noted that agencies ignored the best available information, which warns that the offshore wind projects "catalyze various perturbations" affecting whale habitat, increased vessel noise and traffic, and the risk of collision with whales. Petitioners told the First Circuit that "[c]ollectively, these perturbations could affect the use of this region by [R]ight [W]hales as well as influence their migratory movement throughout the mid-Atlantic region."55 As Petitioners aptly noted, the Biological Opinion "does not assess the influence of these perturbations" on the Right Whale and its use of the area for this Project or the whales' "migration through the mid-Atlantic."56

But the First Circuit sidestepped whether NMFS' jeopardy analysis should have considered the impacts

^{54.} Nantucket Residents Against Turbines v. U.S. Bureau of Ocean Energy Mgmt., No. 23-1501, 2023 WL 6550487 *15 (1st Cir. Oct. 29, 2023) (quoting Ester Quintana-Rizzo et al., Residency, Demographics, and Movement Patterns of North Atlantic Right Whales Eubalaena Glacialis in an Offshore Wind Energy Development Area in Southern New England, USA, 45 Endangered Species Research (2021) at 252, https://repository.library.noaa.gov/view/noaa/31617).

^{55.} *Id.* at 16 (quoting Ester Quintana-Rizzo et al., Residency, Demographics, and Movement Patterns of North Atlantic Right Whales Eubalaena Glacialis in an Offshore Wind Energy Development Area in Southern New England, USA, 45 Endangered Species Research (2021) at 253, https://repository.library.noaa.gov/view/noaa/31617).

of other wind turbine projects because, as the First Circuit explained, Petitioners had not shown that the "construction and maintenance of hundreds of wind turbines" throughout southern New England was "incompatible" with the survival of the Right Whale.⁵⁷ But the point is not what Petitioners showed, but what NMFS should have considered as the "best available science" to evaluate whether all these additional wind turbines will cumulatively and adversely affect the Right Whale's survival.

And the First Circuit's conclusion that NMFS was excused in evaluating the effects of these other projects because it was only analyzing the effects of the Vineyard Wind 1 Project is as circular as the wind turbines themselves.⁵⁸

Academics have long decried the gulf between the ESA's statutory requirements and the agencies' inconsistent and inadequate regulations:

While lawmakers envisioned these restrictions as "the institutionalization of... caution," implementation of the statute has instead allowed a steady drumbeat of adverse impacts from federal actions that incrementally push protected species further toward the brink. The U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS), the two expert agencies responsible for assessing other federal agencies' compliance

^{57.} Pet. App. 31a.

^{58. 50} C.F.R. § 402.14.

with section 7's prohibitions (collectively the Services), routinely sanction actions that negatively affect both listed species and the habitat designated as essential to their conservation—leaving species' recovery to an often unspecified, uncertain, and distant date in the future. On their face, the prohibitions in section 7(a)(2) appear to draw clear lines in the sand that prevent actions by federal agencies from driving threatened and endangered species closer to extinction and gradually diminishing habitat essential to these species' recovery. However, both regulators tasked with implementing the ESA have interpreted this part of the statute to allow for continued incremental declines of both listed species and their designated critical habitat.⁵⁹

The statistics tell a story of agency neglect as more than a dozen species have gone extinct under the federal agency's narrowed interpretation of its responsibility under the ESA:

An analysis covering more than seven years and ending in 2015 found that FWS issued only two biological opinions concluding that a federal project would jeopardize a listed species (out of over 88,000 formal and informal consultations); no opinion found destruction or adverse modification of critical habitat. A study evaluating biological opinions issued between

^{59.} Daniel J. Rohlf & Colin Reynolds, Restoring the Emergency Room: How to Fix Section 7(a)(2) of the Endangered Species Act, 52 Envtl. L. 685, 686 (2022).

2005-2009 found a slightly higher incidence of FWS biological opinions finding jeopardy and destruction or adverse modification of critical habitat—2.4% and 0.6% of BiOps respectively.⁶⁰

Because the Vineyard Wind 1 Project's Biological Opinion explicitly states that it ignores and does not consider the cumulative effects of other planned projects on this severely endangered whale species, it is directly contrary to the ESA's no-jeopardy and best available science requirements. Although the agencies' interpretation of the ESA may have been entitled to judicial deference in earlier days, this Court's recent Loper Bright decision leaves no doubt that the Courts—not marine biologists—must determine the validity of the agencies' Biological Opinion with reference to the plain language of the ESA. And that plain language demands the use of "the best scientific and commercial data available" without exclusions set forth in the agencies' ESA regulations.

2. The First Circuit's Decision Directly Conflicts with Decisions of the Ninth and the D.C. Circuits

The Vineyard Wind 1 Biological Opinion acknowledges that NMFS ignored and did not analyze how other

^{60.} Id.

^{61. 16} U.S.C. § 1536(a)(2).

^{62.} Loper Bright Enterprises v. Raimondo, 144 S. Ct. 2244 (2024).

^{63. 16} U.S.C. § 1536(a)(2).

offshore wind projects now on the drawing board within the North Atlantic Right Whale's habitat and migration routes will affect the species, taking the position that "[f]uture offshore windfarms, as well as activities caused by aspects of their development and operation," including construction of thousands of giant turbines on millions of acres of ocean bed, could be ignored because "future offshore wind project will require section 7 consultation."

When faced with a similar issue, the Ninth Circuit reached an opposite decision that was consistent with the ESA's requirements. In *Conner v. Burford*, ⁶⁶ the Ninth Circuit invalidated a Biological Opinion for a federal oil and gas lease because it failed to consider the environmental impacts of planned oil-and-gas-well locations—even though each well location would later be subject to a post-lease Section 7 consultation and its own biological opinion, stating: "Although we recognize that the precise location and extent of future oil and gas activities were unknown at the time, extensive information about the behavior and habitat of the species in the areas covered by the leases was available."

In that case, the court explained that

incomplete information about post-leasing activities does not excuse the failure to

^{64.} See 2021 Biological Opinion supra note 7 at 117.

^{65.} Id. at 330.

^{66.} Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988).

^{67.} Id. at 1454.

comply with the statutory requirement of a comprehensive biological opinion using the best information available. 16 U.S.C. § 1536(a)(2). With the post-leasing and biological information that was available, the FWS could have determined whether post-leasing activities in particular areas were fundamentally incompatible with the continued existence of the species.⁶⁸

The *Conner* court flatly rejected the government's rationale—relied on in this Biological Opinion—that cumulative effects of future projects could be ignored:

With the information available, the FWS could also have identified potential conflicts between the protected species and post-leasing activities due to the cumulative impact of oil and gas activities. For example, species like the grizzly and the gray wolf require large home ranges making it critical that ESA review occur early in the process to avoid piecemeal chipping away of habitat.⁶⁹

As the Ninth Circuit explained in Wild Fish Conservancy v. Salazar:⁷⁰

^{68.} *Id.*; see also Nat. Res. Def. Council v. Haaland, 102 F.4th 1045, 1069–70 (9th Cir. 2024) (holding that agency must make a meaningful determination of a project's impacts by looking beyond the immediate project).

^{69.} Id.

^{70.} Wild Fish Conservancy v. Salazar, 628 F.3d 513, 521–22 (9th Cir. 2010).

Conner rejected biological opinions addressing only the first, preliminary stage in a multistage project. The case involved the federal government's issuance of more than 700 leases for oil and gas exploration in two national forests. Before the leases were issued, the Service prepared a biological opinion for each forest. Concluding that there was "insufficient information available to render a comprehensive biological opinion beyond the initial lease phase," []the Service considered the effects only of the leases themselves, not of the oil and gas activity to follow on the leased land. [] Instead of comprehensive biological opinions at the leasing stage, the Service included in the leases stipulations requiring additional environmental consultation prior to any "surface-disturbing activities."

We held that the limited scope of the biological opinions violated the ESA. The Service's obligation, we said, was "to analyze the effect of the *entire* agency action." [] Because "[p] umping oil and not leasing tracts is the aim of congressional mineral leasing policy," the agency action necessarily encompassed "not only leasing but leasing and all postleasing activities through production and abandonment." [] The Service's proposal to conduct "incremental-step consultation" was an inadequate alternative. That approach might result, for example, in the "piecemeal chipping away of habitat" for endangered species. [] The Service was thus "required to prepare, at the leasing stage, a comprehensive biological opinion" considering "all phases of the agency action." [] Because it had not done so, the biological opinions were invalid.⁷¹

In *Thomas v. Peterson*,⁷² the Ninth Circuit also explained that the substantive requirements of the ESA require more strict enforcement of its procedural requirements compared to NEPA:

We acknowledge that the ESA's substantive provisions distinguish it from NEPA, but the distinction acts the other way. If anything, the strict substantive provisions of the ESA justify more stringent enforcement of its procedural requirements, because the procedural requirements are designed to ensure compliance with the substantive provisions. The ESA's procedural requirements call for a systematic determination of the effects of a federal project on endangered species. If a project is allowed to proceed without substantial compliance with those procedural requirements, there can be no assurance that a violation of the ESA's substantive provisions will not result. The latter, of course, is impermissible.⁷³

Further and contrary to the First Circuit's kneejerk adoption of NMFS' interpretation of what constitutes best

^{71.} Wild Fish Conservancy v. Salazar, 628 F.3d 513, 521–22 (9th Cir. 2010).

^{72.} Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985).

^{73.} *Thomas v. Peterson*, 753 F.2d 754, 764 (9th Cir. 1985) (citing *TVA v. Hill*, 437 U.S. 153).

available information under the ESA, the D.C. Circuit has just recently ruled that, in cases that involve the proper interpretation of the Endangered Species Act, it is the Courts—not NMFS and its marine biologists—who must determine the proper meaning of the statute.⁷⁴ In *Wild Fish Conservancy v. Salazar*,⁷⁵ the court affirmed the principle enunciated in the recent *Lobstermen's*, case—that legal or procedural violations of ESA do not require subject-matter expertise: "Where the opinion's flaws are 'legal in nature,' however, '[d]iscerning them requires no technical or scientific expertise[.]"⁷⁷

3. The First Circuit's Erroneous Decision Will Have Far-Reaching Implications on the Ocean Environment and the Species that Depend on It

Construction of wind turbine projects in the Atlantic Ocean is occurring at a blistering pace. In March 2021, the Biden administration identified a series of "bold actions" to "catalyze offshore wind energy" development.⁷⁸ The

^{74.} Maine Lobstermen's Ass'n v. Nat'l Marine Fisheries Serv., 70 F.4th 582 (D.C. Cir. 2023).

^{75.} Wild Fish Conservancy v. Salazar, 628 F.3d 513 (9th Cir. 2010).

^{76.} Maine Lobstermen's Ass'n, 70 F.4th 582.

^{77.} Wild Fish Conservancy, 628 F.3d at 532 (quoting Defs. of Wildlife v. U.S. Env't Prot. Agency, 420 F.3d 946, 976 (9th Cir. 2005)).

^{78.} Biden Administration, Fact Sheet: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs (Mar. 29, 2021), https://www.whitehouse.gov/briefing-room/statements-

White House stated its goal of deploying 30 gigawatts of offshore wind energy by 2030 and announced that it was taking "coordinated steps to support rapid offshore wind deployment." To meet the 2030 target, the administration announced that it planned to advance new lease sales and complete review of "at least 16 Construction and Operations Plans (COPs) by 2025." 80

As of today, 30 offshore wind projects (that together will contain thousands of wind turbines) are in various stages of development, all of which will be located in, along, or very near the endangered North Atlantic Right Whale's migration path and habitat.⁸¹

A NMFS study from 2021 identifies impacts on the North Atlantic Right Whale, as well as other endangered species, from wind energy development:

Wind energy development is anticipated to rapidly expand along the U.S. East Coast in the coming years. Through the end of 2020, BOEM has issued 15 leases for offshore wind development in areas ranging from Massachusetts to North Carolina. If developed, these projects will introduce both temporary and long-term impacts including increased underwater noise, habitat disturbance, and

releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/.

^{79.} Id.

^{80.} *Id*.

^{81.} See Strategy on the North Atlantic Right Whale supra note 8 at 5.

vessel traffic (e.g., associated with day-to-day operations).82

NMFS failed to analyze the effects of these coordinated projects on the Right Whale, even when the agency knew that these projects will be built in the areas where the North Atlantic Right Whale migrates, as recognized by BOEM and NOAA in their Joint Strategy to protect the Right Whales: North Atlantic Right Whales "migrating along the U.S. Atlantic Coast have the potential to travel near or through many currently proposed [offshore wind] developments along the Atlantic Coast." Offshore wind projects, many of which were not even considered by NMFS in its Section 7 Consultation, "occur in areas that are important for [North Atlantic Right Whale] vital functions."

^{82.} See National Marine Fisheries Service, Species in the Spotlight: North Atlantic Right Whale, Priority Actions 2021–2025 at 13, https://media.fisheries.noaa.gov/2021-04/SIS%20 Action%20Plan%202021_NARightWhale-FINAL%20508.pdf (last visited Sept. 16, 2024).

^{83.} Id. at 14.

^{84.} Id.

CONCLUSION

Petitioners ask this Court to grant review of the important issue presented in this petition to resolve the split among the circuits and provide guidance to lower courts that will soon be facing the identical issue on how to conserve endangered species while seeking to achieve renewable energy objectives.

Respectfully submitted,

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September 23, 2024



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APPENDIX A — OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT, FILED APRIL 24, 2024

UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

No. 23-1501

NANTUCKET RESIDENTS AGAINST TURBINES; VALLORIE OLIVER,

Plaintiffs, Appellants,

v.

U.S. BUREAU OF OCEAN ENERGY
MANAGEMENT; NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION; NATIONAL
MARINE FISHERIES SERVICE; DEBRA
HAALAND, SECRETARY OF THE INTERIOR;
GINA M. RAIMONDO, SECRETARY OF
COMMERCE; VINEYARD WIND 1, LLC,

Defendants, Appellees.

APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

[Hon. Indira Talwani, U.S. District Judge]

Before Kayatta, Lynch, and Gelpí, Circuit Judges.

April 24, 2024

KAYATTA, Circuit Judge. After consulting with the National Marine Fisheries Service ("NMFS"), the U.S. Bureau of Ocean Energy Management ("BOEM") approved the construction of Vineyard Wind, a wind power project off the coast of Massachusetts. A group of Nantucket residents -- organized as Nantucket Residents Against Turbines ("Residents") -- allege that the federal agencies violated the Endangered Species Act by concluding that the project's construction likely would not jeopardize the critically endangered North Atlantic right whale. The Residents further allege that BOEM violated the National Environmental Policy Act by relying on NMFS's flawed analysis.

We disagree. NMFS and BOEM followed the law in analyzing the right whale's current status and environmental baseline, the likely effects of the Vineyard Wind project on the right whale, and the efficacy of measures to mitigate those effects. Moreover, the agencies' analyses rationally support their conclusion that Vineyard Wind will not likely jeopardize the continued existence of the right whale. We therefore affirm the judgment of the district court. Our reasoning follows.

I.

Α.

This case lies at the intersection of four federal environmental statutes: (1) the Outer Continental Shelf Lands Act ("OCSLA"), (2) the Endangered Species Act ("ESA"), (3) the Marine Mammal Protection Act

("MMPA"), and (4) the National Environmental Policy Act ("NEPA").

1.

OCSLA authorizes the Secretary of the Interior to issue leases for offshore wind development. 43 U.S.C. § 1337(p)(1)(C). The Secretary has delegated her leasing authority to BOEM. 30 C.F.R. § 585.100. Before issuing an offshore lease, BOEM must "coordinate and consult with relevant [f]ederal agencies," and it must comply with the consultation requirements of other federal environmental statutes, such as the ESA. *Id.* § 585.203.

Once BOEM issues an offshore lease, its work is not done. The agency must also approve a site assessment plan and a construction and operations plan. *See id.* §§ 585.605, 585.620. The construction and operations plan must describe "all planned facilities that [the lessee] will construct and use," as well as "all proposed activities including [the lessee's] proposed construction activities, commercial operations, and conceptual decommissioning plans." *Id.* § 585.620(a)-(b). No construction may begin until BOEM approves the construction and operations plan. *Id.* § 585.620(c).

2.

Under section 7 of the ESA, a federal agency must consult with NMFS whenever an agency action "may affect" an endangered marine species like the right whale. 50 C.F.R. § 402.14(a); 16 U.S.C. § 1536(a)(2); see also 35

Fed. Reg. 18319, 18320 (Dec. 2, 1970) (declaring the right whale an endangered species). A section 7 consultation ends with NMFS issuing a biological opinion. 16 U.S.C. § 1536(b)(3)(A). In that opinion, NMFS must determine if the agency action is "likely to jeopardize the continued existence" of the endangered species. 50 C.F.R. § 402.14 (h)(iv). NMFS must reach this determination after reviewing the "best scientific and commercial data available." *Id.* § 402.14(g)(8).

Section 9 of the ESA generally prohibits the "take" of an endangered species. 16 U.S.C. § 1538(a)(1)(B). To "take" an endangered species means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect," the species, or "to attempt . . . any such conduct." *Id.* § 1532(19). Relevant here are so-called "incidental takes." These are takes that "result from, but are not the purpose of," an agency's or applicant's otherwise lawful activity. 50 C.F.R. § 402.02.

Some incidental takes are allowed. 16 U.S.C. § 1536 (b)(4), (o). As relevant here, incidental take approval requires NMFS to issue an "incidental take statement" along with the biological opinion. 50 C.F.R. § 402.14(i); 16 U.S.C. § 1536(b)(4). That statement must, among other things, (1) describe the extent of the anticipated incidental take; (2) outline reasonable measures to reduce and monitor such take; and (3) incorporate measures to comply with section 101(a)(5) of the MMPA. See 50 C.F.R. § 402.14(i)(1).

3.

When the animal to be taken is an endangered marine mammal, NMFS may not "issue an incidental take statement . . . under the ESA until the take has been authorized under the MMPA. The incidental take statement must incorporate any mitigation measures required under the MMPA." *Ctr. for Bio. Diversity v. Bernhardt*, 982 F.3d 723, 742 (9th Cir. 2020) (internal citations omitted).

Like the ESA, the MMPA regulates actions that "harass" endangered species. See 16 U.S.C. §§ 1362(13), 1372(a). Under the MMPA, there are two types of harassment. Level A harassment is "any act of pursuit, torment, or annoyance" that has the "potential to injure a marine mammal or marine mammal stock in the wild." Id. § 1362(18)(A)(i), (18)(C). Level B harassment is less serious, and encompasses "any act of pursuit, torment, or annoyance" that has the "potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns." Id. § 1362(18)(A)(ii), (18)(D). NMFS may authorize the incidental harassment of a protected marine mammal if it makes certain factual findings. See 16 U.S.C. §§ 1373, 1374. This permission is called an incidental harassment authorization.

^{1.} The necessary findings will depend on the endangered marine mammal. See 16 U.S.C. § 1373(a) (requiring the Secretary of the Interior to prescribe regulations governing take of "each species of marine mammal as he deems necessary and appropriate"); id. § 1374(b)(1) (mandating that any permit for taking an endangered marine mammal comply with any applicable regulation promulgated under section 1373).

4.

Finally, there is NEPA. When a major federal agency action will have significant environmental effects, NEPA requires that the acting agency draft an environmental impact statement. See 42 U.S.C. § 4332(C); 40 C.F.R. § 1502.3. That statement must analyze, among other things, the "reasonably foreseeable environmental effects" of the proposed action, the "reasonable range of [technically and economically feasible] alternatives" to the proposed action, and reasonable measures to mitigate the environmental effects of the proposed action. 42 U.S.C. § 4332(C); see also Dubois v. U.S. Dep't of Agric., 102 F.3d 1273, 1286 (1st Cir. 1996). When considering the effects of a proposed agency action on an endangered species, the environmental impact statement may rely on, or incorporate the findings of, a biological opinion. See City of Tacoma v. FERC, 460 F.3d 53, 75-76, 373 U.S. App. D.C. 117 (D.C. Cir. 2006).

NEPA is a procedural statute. It "does not mandate particular results, but simply prescribes the necessary process" for evaluating an agency action's environmental effects. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350, 109 S. Ct. 1835, 104 L. Ed. 2d 351 (1989). If an environmental impact statement sufficiently analyzes the likely environmental effects of a proposed agency action, the agency can still proceed on the grounds that "other values outweigh the environmental costs." *Id.*

В.

In 2014, BOEM made a small portion of the Massachusetts Wind Energy Area -- a section of the Outer Continental Shelf -- available for lease. *See* 79 Fed. Reg. 34771 (June 18, 2014). One year later, the agency leased a plot measuring 675 square kilometers to Vineyard Wind 1, LLC.

In 2017, Vineyard Wind submitted a construction and operations plan, proposing to build an offshore wind project in the northern portion of the lease area (the "wind development area"). The wind development area is located approximately fourteen miles southeast of Martha's Vineyard, and it will host turbines capable of generating approximately 800 megawatts of clean wind energy. That is enough energy to power 400,000 homes.

The federal agencies then began the environmental review process. In 2018, BOEM requested consultation with NMFS pursuant to section 7 of the ESA. Consultation began in April 2019. NMFS issued its first biological opinion in September 2020, finding that the Vineyard Wind project would likely not jeopardize the continued existence of the right whale. The opinion also outlined mitigation measures to reduce the project's effects on the right whale. After new science became available, NMFS reinitiated consultation, eventually issuing an updated biological opinion in October 2021. The updated opinion also found that the project would likely not jeopardize the right whale's continued existence. Both the 2020 and 2021 versions of the biological opinion included incidental take

statements. Those statements both concluded that, once Vineyard Wind adopted appropriate mitigation measures, the maximum anticipated take from project construction was Level B harassment -- caused by installation noise -- of twenty right whales.

BOEM issued its final environmental impact statement in March 2021. The environmental impact statement included its own analysis of how the proposed project would affect right whales and other marine mammals. It also included an appendix of mitigation measures.

In June 2021, relying on BOEM'S final environmental impact statement, NMFS published notice of its decision to issue an incidental harassment authorization for Level B harassment of up to twenty right whales. The Residents do not challenge the incidental harassment authorization, which is the subject of a separate appeal before this court.

One month later, in July 2021, BOEM formally approved the Vineyard Wind construction and operations plan. Because NMFS's updated biological opinion was still pending at the time, BOEM's approval was subject to any new conditions or mitigation measures later identified in the updated biological opinion. In the meantime, BOEM's approval notice imposed the mitigation measures discussed in the environmental impact statement and the 2020 biological opinion. Several of those measures are relevant here:

• Seasonal restrictions: Vineyard Wind may not conduct any pile driving between

January 1 and April 30. Right whales are more likely to be present in the lease area during this time of year.

- **Noise attenuation**: Vineyard Wind must install technology that reduces the distance that pile driving noise can travel underwater.
- Soft start requirements: Vineyard Wind must precede pile driving with "three strikes from the impact hammer at reduced energy, followed by a 1-minute waiting period." This process must take place three times before pile driving, so whales have time to leave the area.
- Clearance and shutdown zones: Vineyard Wind must determine that no whales are within the clearance zone before pile driving may begin, and it must immediately suspend pile driving if a whale enters the shutdown zone. The precise size of the clearance zone depends on several factors, such as time of year and type of foundation being installed. The radius of the shutdown zone is 3.2 kilometers for all foundation types.
- **Protected species observers**: Vineyard Wind must employ trained observers to watch for whales in the clearance and shutdown zones.

- Passive acoustic monitoring: Vineyard Wind must install monitoring technology to detect whale noise within the clearance and shutdown zones.
- Vessel speed limits: Project vessels must travel at ten or fewer knots while going to, from, or within the wind development area. Vessels carrying crew members may go faster, but they must use species observers and acoustic monitoring to watch for whales. If the crew vessels detect a whale, all vessels must obey the ten-knot speed limit for the rest of the day.

BOEM also imposed various post-construction mitigation measures. Among other things, Vineyard Wind must clean up the installation sites, monitor the health of the seabed and local plankton populations, monitor operational noise for at least three years, and share survey data with both indigenous tribes and the federal government.

In January 2022, after approving construction of Vineyard Wind, BOEM expressly adopted the findings of the updated October 2021 biological opinion. Given the similarity between the 2020 and 2021 versions of the biological opinion, BOEM concluded that "no further action [was] required in order for Vineyard Wind to proceed with construction and operation of the [wind project]."

C.

In August 2021, the Residents challenged BOEM's approval of Vineyard Wind in the District of Massachusetts. The Residents alleged that NMFS had violated the ESA by issuing a deficient biological opinion about Vineyard Wind's effects on the right whale. They further alleged that BOEM violated NEPA by failing to take the requisite "hard look" at Vineyard Wind's environmental impacts, and by relying on the allegedly defective updated biological opinion. The district court granted summary judgment to the federal agencies on all claims. The Residents appealed.

In their main brief on appeal, the Residents focus exclusively on alleged errors in NMFS's updated biological opinion. They challenge BOEM's environmental impact statement only to the extent it relied on that opinion. We train our review accordingly, treating as waived any other independent challenges to the environmental impact statement. *See Rife v. One W. Bank, F.S.B.*, 873 F.3d 17, 19 (1st Cir. 2017) (explaining that arguments not raised or properly developed in the opening brief are waived). Thus, we construe the Residents as arguing on appeal that (1) NMFS violated the ESA by issuing a flawed biological opinion, 2 and (2) BOEM violated NEPA by relying on NMFS's ostensibly flawed biological opinion.

^{2.} For the remainder of this opinion, the phrase "biological opinion" will refer to NMFS's updated 2021 biological opinion, unless otherwise specified.

II.

We review the district court's grant of summary judgment de novo. *Dubois*, 102 F.3d at 1283. Summary judgment is appropriate if there is "no genuine issue as to any material fact and . . . the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c).

We review biological opinions under § 706 of the Administrative Procedure Act. See Pac. Coast Fed. of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 426 F.3d 1082, 1090 (9th Cir. 2005); Strahan v. Linnon, No. 97-1787, 1998 U.S. App. LEXIS 16314, 1998 WL 1085817, at *2 (1st Cir. July 16, 1998) (per curiam) (unpublished). As a result, we have a "narrow role to play." Dist. 4 Lodge of the Int'l Ass'n of Machinists & Aerospace Workers Loc. Lodge 207 v. Raimondo, 18 F.4th 38, 44 (1st Cir. 2021). We may set aside "an otherwise proper agency action if [the action] is arbitrary and capricious or . . . not based on substantial evidence." Id. (citing 5 U.S.C. § 706(2)(A), (E)). This standard of review is deferential, especially when the agency action involves "technical or scientific matters within the agency's area of expertise." Citizen's Awareness Net., Inc. v. U.S. Nuclear Reg. Comm'n, 59 F.3d 284, 290 (1st Cir. 1995). To survive judicial review, the agency need only show that it has "considered the relevant factors and articulated a rational connection between the facts found and the choice made." Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 105, 103 S. Ct. 2246, 76 L. Ed. 2d 437 (1983); see also Motor Vehicle Mfrs.

^{3.} The same goes for environmental impact statements. *See Dubois*, 102 F.3d at 1284.

Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43, 103 S. Ct. 2856, 77 L. Ed. 2d 443 (1983).

Meanwhile, when reviewing a lead agency's reliance on a consulting agency's biological opinion, we must ask whether the reliance itself was arbitrary and capricious. See City of Tacoma, 460 F.3d at 75. Reliance can be arbitrary and capricious if the underlying biological opinion was deficient, or if the agency blindly adopted the biological opinion without conducting its own independent investigation. *Id.* at 75-76.

III.

The Residents' critiques of the biological opinion upon which BOEM's environmental impact statement relied fall into three buckets. First, the Residents allege that the biological opinion failed to properly analyze the current status and environmental baseline of the right whale. Second, they allege that the biological opinion ignored the effects of the Vineyard Wind project on right whales, while relying on flawed measures to mitigate those effects. Third, they allege that the biological opinion ignored the project's additive effects on the right whale's long-term recovery prospects.

We address each contention in turn.

A.

A consulting agency's biological opinion must "[e]valuate the current status and environmental baseline" of the affected endangered or threatened species. 50

C.F.R. § 402.14(g)(2). The phrase "environmental baseline" refers to the "condition of the listed species . . . without the consequences . . . caused by the proposed action." *Id.* § 402.02. NMFS must root this evaluation in the best available commercial and scientific data. *Id.* § 402.14(g)(8).

The Residents claim that the biological opinion ignored the best available data about the right whale's current status and environmental baseline. They give three examples to support this argument. None of them is persuasive.

1.

The Residents argue that the biological opinion ignored a recent study -- the Quintana-Rizzo study -- that highlighted the growing importance of southern New England waters for right whale survival. Specifically, the Residents point to Quintana-Rizzo's findings that right whales are "becoming more reliant" on southern New England waters, and that certain spots in southern New England waters are "hotspot[s]" for whales to feed and socialize.

The record belies this challenge to the biological opinion. The opinion expressly acknowledged the growing importance of southern New England waters for right whales. For instance, the opinion noted that, as global temperatures have ticked up, "the location of feeding grounds has shifted, with . . . more [right whales] being observed in Cape Cod Bay . . . and south of Nantucket." The biological opinion also expressly cited Quintana-

Rizzo for the proposition that waters off Rhode Island and Massachusetts "could be a feeding location for whales that stay in the mid-Atlantic and north during the winterspring months and a stopover site for whales migrating to and from calving grounds." Finally, the biological opinion again cited Quintana-Rizzo to note that right whales "have been increasingly sighted" in waters off the coast of Massachusetts. Thus, NMFS repeatedly acknowledged that right whales are increasingly present in southern New England waters. ⁴

Furthermore, the biological opinion cited Quintana-Rizzo to note that certain "'hotspots' of higher use" had emerged in southern New England waters. But NMFS also noted Quintana-Rizzo's finding that whales have only used hotspots located in the project area during the spring, when pile driving is banned. So, nothing in Quintana-Rizzo's hotspot analysis rendered unreasonable the agency's conclusion that Vineyard Wind likely did not imperil the long-term survival of the right whale by interfering with "hotspots" in southern New England.

2.

The Residents next point to a chart in Quintana-Rizzo that illustrates a high rate of right whale sightings in the Massachusetts and Rhode Island Wind Energy Areas

^{4.} The Residents also suggest, in passing, that NMFS ignored another study -- Hayes 2021 -- that emphasized the importance of southern New England for the right whale. Because we find that the biological opinion expressly considered that phenomenon, we need not analyze Hayes 2021 individually.

during August 2019. Broadly, Quintana-Rizzo looked at aerial survey data collected between 2011-2015 and 2017-2019. And in most surveyed years, sighting rates were highest between January and April, when pile driving for the Vineyard Wind project is banned. But in August 2019, there was a spike in sighting rates. According to the Residents, NMFS ignored the implication of this spike -- that right whales are increasingly present during a month (August) when pile driving is allowed. Thus, on the Residents' view, NMFS inadequately analyzed the current status and environmental baseline of the right whale.⁵

We disagree. In the biological opinion, NMFS concluded that the "best available information regarding marine mammal densities in the project area is provided by habitat-based density models" produced by a laboratory at Duke University. According to those models, right whales were most likely to be in the project area between January and April, with minimal presence in August. The agency then concluded that Quintana-Rizzo -- even though it relied on aerial surveys rather than habitat modeling -- was consistent with the habitat-based models. Indeed, Quintana-Rizzo found consistently high sighting rates during the January—April period, with a solitary outlier in August 2019. Thus, it was hardly unreasonable for NMFS to conclude that January—April was still the most popular timeframe for right whales in the project area.

^{5.} The Residents also make this point to argue against the efficacy of seasonal restrictions as a mitigation measure. Our analysis here refutes that argument as well. We discuss the Residents' other challenges to Vineyard Wind's mitigation measures later in this opinion.

At bottom, the Residents are basically arguing that NMFS should have weighed Quintana-Rizzo's August 2019 finding more heavily than it did. But courts must "exercise great deference when [evaluating] claims about competing bodies of scientific research." See Nat'l Ass'n of Mfrs. v. EPA, 750 F.3d 921, 924, 409 U.S. App. D.C. 425 (D.C. Cir. 2014). NMFS concluded that habitat-based density models were the best available science on right whale distribution patterns. The Residents have not shown that this conclusion -- which itself "deserv[es] deference" -- was unreasonable. See Miccosukee Tribe of Indians of Fla. v. United States, 566 F.3d 1257, 1265 (11th Cir. 2009) (citing Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 377-78, 109 S. Ct. 1851, 104 L. Ed. 2d 377 (1989)). NMFS then concluded that Quintana- Rizzo was consistent with the habitat-based density models. And based on our review of Quintana-Rizzo, we cannot say that this conclusion "jumped the rails of reasonableness." Nat'l Ass'n of Mfrs., 750 F.3d at 924. Accordingly, the agency's decisionmaking survives review.

3.

The Residents also argue that NMFS ignored data from two other studies -- Pettis 2021 and Hayes 2021. Both studies are annually updated assessments of right whale population and mortality trends. The Residents claim that NMFS ignored Pettis 2021's finding that whale deaths are outnumbering whale births, while dismissing Hayes 2021's finding that right whales have low resilience to human-induced mortality. The Residents are mistaken once again.

Citing an earlier version of Pettis 2021 (i.e., Pettis 2020), the biological opinion clearly acknowledged that "numbers of births are well below the number needed to compensate for expected mortalities." And the opinion cited Pettis 2021 for the proposition that whale births are less frequent because they now occur (on average) every 7.6 years, which is an increase from historic calving intervals of 3-5.8 years. Thus, NMFS acknowledged the very finding in Pettis 2021 that the Residents claim went unacknowledged: that right whales face long-term population decline.

The Residents' claims about Hayes 2021 fare no better. While the biological opinion cites extensively to Hayes 2021, the Residents complain that the agency did not cite the study for the proposition that the right whale has a potential biological removal of 0.8, and is therefore susceptible to human-induced mortality. However, the biological opinion plainly acknowledges that the right whale's "resilience to future perturbations is expected to be very low." Elsewhere, the biological opinion also describes the right whale's population size as "small enough for the death of any individual to have measurable effects."

So, the biological opinion plainly discussed the unique vulnerability of the right whale population to humaninduced mortality. Even if the agency did not explicitly

^{6.} Potential biological removal means the "maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population." 16 U.S.C. § 1362(20).

cite Hayes 2021 to support that proposition, this does not render the biological opinion's findings arbitrary and capricious. What matters is that the agency recognized and acknowledged the phenomenon -- low resilience to the human-caused death of just one whale -- that Hayes 2021 identified.⁷

В.

The Residents next take aim at the biological opinion's analysis of Vineyard Wind's effects on right whales, and its related conclusion that certain measures could mitigate those effects. The Residents' arguments address four of Vineyard Wind's potential effects on right whales: (1) construction noise; (2) operational noise; (3) line entanglement; and (4) vessel strikes. We address each in turn.

1.

The Residents argue that the biological opinion improperly analyzed the impact of construction noise (i.e., pile driving) on right whales. Basically, they argue that pile driving is guaranteed to cause Level A harassment, even

^{7.} To the extent the Residents are arguing that NMFS had to cite Hayes 2021's precise finding that right whales had a potential biological removal of 0.8, that argument is waived. The district court found that the Residents had not provided adequate notice of this argument in their notice of intent to sue, and the Residents do not challenge that holding on appeal. Nantucket Residents Against Turbines v. U.S. Bureau of Ocean Energy Mgmt., 675 F. Supp. 3d 28, 54-55 (D. Mass. 2023).

though the biological opinion found that such harassment was "extremely unlikely."

The Residents' argument proceeds in three parts. First, they assert that a whale is subject to Level A harassment from construction noise when it is within 7.25 kilometers of the construction site. Second, they note that the shutdown zone -- that is, the zone in which pile driving must cease if a right whale is spotted -- only extends 3.2 kilometers from the site. The Residents suggest this zone is too small, because a whale can linger in the noisy zone (and thereby suffer Level A harassment) without triggering a shutdown. Third, the Residents claim that the measures to detect a whale in either the shutdown zone or the broader noisy zone are only marginally effective. So, the Residents argue, Level A harassment of at least one whale is effectively guaranteed, despite the biological opinion's contrary finding.

Each link in the Residents' logical chain is flawed.

First, the Residents' foundational premise is wrong. Level A harassment does not automatically occur when a whale is within 7.25 kilometers of pile driving. The Residents fundamentally misread the relevant section of the biological opinion. As the government correctly notes in its brief, the "7.25-kilometer area corresponds to the area where Level A harassment . . . would result after *cumulative exposure during a 24-hour period* in which [a jacket foundation was] installed," and where the

^{8.} As the government's brief explains, Vineyard Wind uses pile driving to install two types of foundation. Monopile foundations are for wind turbine generators, and they require "a single pile driven

only minimization measure was 6-dB sound attenuation. (Emphasis added). In other words, a whale within 7.25 kilometers of jacket foundation pile driving could only experience Level A harassment if it remained in that zone throughout the installation process, and if Vineyard Wind only used one minimization measure. Under those same conditions, immediate Level A harassment would only occur during jacket foundation installation if a right whale got within four meters of the pile driver. The Residents never assert that this is likely to happen.

Second, the Residents' challenge to the size of the 3.2-kilometer shutdown zone is most to the extent it applies to jacket foundation installation. An appeal is moot if the reviewing court "cannot affect the matter in issue or cannot grant effectual relief." In re Cont. Mortg. Invs., 578 F.2d 872, 877 (1st Cir. 1978). Here, Vineyard Wind has completed all jacket foundation pile driving. There is no indication that it will resume. So, even if NMFS violated the ESA by relying on a 3.2-kilometer shutdown zone to mitigate noise-related take from jacket foundation installation (an issue we expressly do not decide), we can no longer grant any injunctive relief that would remedy that violation. See Ogunquit Vill. Corp. v. Davis, 553 F.2d 243, 245-47 (1st Cir. 1977) (finding that the court was "unable to fashion a [generally applicable] remedy" for NEPA violations once the challenged project had been completed, and further stating that the responsibility for crafting such a remedy lay with Congress).

into the ground." Jacket foundations are for support infrastructure and electrical service platforms. They require "three or four smaller piles driven into the ground."

The Residents retort that NMFS's alleged violation of the ESA falls under the mootness exception for claims "capable of repetition, yet evading review." But this exception applies only when: "(1) the challenged action was in its duration too short to be fully litigated prior to its cessation or expiration, and (2) there [is] a reasonable expectation that the same complaining party [will] be subjected to the same action again." Weinstein v. Bradford, 423 U.S. 147, 149, 96 S. Ct. 347, 46 L. Ed. 2d 350 (1975) (per curiam). There is no reasonable expectation that Vineyard Wind will install jacket foundations at the same location again. Accordingly, the exception does not apply, and the Residents' challenge to the 3.2-kilometer exclusion zone -- as it pertains to jacket foundation installation -- is moot.9

Because the jacket foundations are complete, the only remaining pile driving involves monopile foundations. So, could the Residents simply apply their "shutdown zone is too small" argument to monopile foundation installation' The answer is no. According to the biological opinion, the cumulative Level A harassment threshold for monopile foundation installation (assuming 6-dB noise attenuation)

^{9.} The Residents also assert that their claims fall under a mootness exception for issues of "great public import." But they cite only California state case law to support the existence of such an exception. The Residents do not identify -- nor could we find -- any controlling federal case that has recognized a "public importance" exception to the mootness doctrine. And this makes sense. Federal courts may only decide live "Cases" or "Controversies." See U.S. Const. art. III, § 2. Where no actual controversy exists, a federal court may not offer an advisory opinion. Mangual v. Rotger-Sabat, 317 F.3d 45, 60 (1st Cir. 2003).

is just under 3.2 kilometers. In other words, the standard 3.2-kilometer shutdown zone completely covers the area in which a right whale could be subject to cumulative Level A harassment from monopile foundation installation. So, if a right whale is detected in the zone affected by monopile foundation installation noise, a shutdown is mandatory.

Therefore, the Residents' only remaining argument is that NMFS's proposed mitigation measures cannot reliably detect a whale within the 3.2-kilometer shutdown zone around monopile installation. And that brings us to the third faulty link in the Residents' logic. The Residents cite no record data for the proposition that NMFS's proposed mitigation measures -- soft start procedures, protected species observers, and passive acoustic monitoring -- are ineffective at deterring a whale from, or detecting a whale within, the 3.2-kilometer shutdown zone.

The biological opinion found that soft start procedures -- which require Vineyard Wind to precede pile driving with quieter strikes that give right whales time to swim away -- were "expected to reduce [the] effects" of pile driving noise on right whales. The Residents retort that the biological opinion found no evidence that soft start procedures were effective. But once more, the Residents misapprehend the biological opinion's plain language. NMFS expressly stated that soft start procedures would "likely . . . reduce the duration of exposure to noise that could result in Level A or Level B harassment." The agency then stated that it could not precisely quantify the effect of soft start procedures on right whale take. So, the agency opted for a conservative approach, and did not

"modify the estimated take numbers to account for any benefit provided by the soft start." Read in context, then, the biological opinion did not reflect a lack of confidence in soft start procedures. Instead, it reflected NMFS's cautious approach to calculating incidental take.

The biological opinion also found that acoustic monitoring and protected species observers, deployed in concert, are "highly effective." In response, the Residents' brief cites data from Natural Resources Defense Council v. Pritzker, 62 F. Supp. 3d 969 (N.D. Cal. 2014). 10 That case reviewed an NMFS rule approving the United States Navy's use of low frequency sonar during peacetime training and testing operations. *Pritzker*, 62 F. Supp. 3d at 979. Among other things, the challenged final rule concluded that passive acoustic monitoring had a "25" percent detection probability" with respect to marine mammals, while visual monitoring by protected species observers had a "nine percent detection probability." *Id.* at 996 (quoting 77 Fed. Reg. 50290, 50307 (Aug. 20, 2012)). Thus, the Residents argue, NMFS's proposed mitigation measures are at best 34 percent effective (25 percent plus 9 percent), which is purportedly too low to justify NMFS's confidence that construction noise is highly unlikely to cause Level A harassment to right whales.

We leave aside the broader question of whether a 34 percent detection probability is indeed too low to avoid Level A harassment. We also leave aside the fact that

^{10.} The district court's decision in *Pritzker* was later reversed and remanded by the Ninth Circuit. *See Nat. Res. Def. Council, Inc. v. Pritzker*, 828 F.3d 1125, 1142 (9th Cir. 2016).

Pritzker is a decade-old, vacated district court decision involving an entirely different project. The Residents' argument fails for a more fundamental reason: The Residents never brought the *Pritzker* data to the agencies' attention. As the government notes, the Residents never flagged the *Pritzker* data in their comment letters or notice of intent to sue. And the Residents do not contend otherwise. Accordingly, we cannot consider the *Pritzker* data for the first time on review. 11 See, e.g., Camp v. Pitts, 411 U.S. 138, 142, 93 S. Ct. 1241, 36 L. Ed. 2d 106 (1973) (per curiam) (noting that in a case applying the Administrative Procedure Act, "the focal point for judicial review should be the administrative record already in existence, not some new record made initially in the reviewing court"); United States v. L. A. Tucker Truck Lines, Inc., 344 U.S. 33, 37, 73 S. Ct. 67, 97 L. Ed. 54 (1952) (describing the "general rule" that "courts should not topple over administrative decisions unless the administrative body... . has erred against objection made at the time appropriate under its practice").

In sum, the Residents cannot show that NMFS's conclusion that operational noise from Vineyard Wind was unlikely to subject any right whale to Level A harassment was arbitrary and capricious. Accordingly, their challenge under the ESA must fail.

^{11.} The Residents also cite *Native Village of Chickaloon v. NMFS*, 947 F. Supp. 2d 1031 (D. Alaska 2013) to argue that passive acoustic monitoring is ineffective. We reject this argument for the same reason we reject the Residents' reliance on *Pritzker*.

2.

The Residents next argue that NMFS irrationally dismissed a study (Stober 2021) that analyzed the effects of wind turbine operational noise on right whales.

The Residents entirely ignore the biological opinion's extensive analysis of Stober 2021. After detailing the study's methodology, NMFS gave four reasons for limiting its reliance on the study. First, the study itself acknowledged "unresolved uncertainty in [its] methods." Second, the study's estimates of operational noise for the turbines that Vineyard Wind would use were "just a prediction and . . . not based on an in situ evaluation of underwater noise of a 10 MW direct-drive turbine."12 Third. Stober 2021 did not consider contextual factors that could alter how turbine noise moved through water, such as "water depth, sediment type, [and] wind speed." Fourth, Stober 2021 itself suggested that turbine operational noise "may not be detectable above ambient noise," undermining the argument that operational noise would harass nearby marine mammals.

Given these limitations, the biological opinion instead relied on operational noise measurements from a wind farm off Block Island. The agency's determination that these measurements were the best available science commands deference. See Miccosukee Tribe, 566 F.3d at

^{12.} Contrary to the Residents' assertions, NMFS did not dismiss Stober 2021 on the grounds that it only analyzed older gearbox turbines. The agency expressly acknowledged that the study evaluated the "direct-drive turbines" deployed by Vineyard Wind.

1265. And the Residents scarcely engage with the agency's stated rationale for relying on the Block Island data rather than Stober 2021. Accordingly, we will not substitute our judgment for that of the expert agency. See Nat'l Ass'n of Mfrs., 750 F.3d at 924.

3.

The Residents next argue that the biological opinion ignored two phenomena that heighten the risk of right whales dying from entanglement in fishing lines.

First, the Residents claim that the biological opinion ignored the entanglement risk from lines that Vineyard Wind will install to perform fishery studies. This is simply not true. The biological opinion expressly considered the risk of entanglement in those lines. It found such entanglement "extremely unlikely," given the low density of whales during the period when Vineyard Wind will conduct fishery studies; the small number of fishing lines; the short duration of the proposed fishery studies; and the tiny territory in which the study will take place. The Residents neither acknowledge nor discredit the agency's reasoning on this front.

^{13.} The Residents cherry-pick this language to suggest that NMFS dismissed as "extremely unlikely" the prospect that a whale would ever die from entanglement in fishing lines. Of course, that is not at all what the biological opinion said. The "extremely unlikely" language refers to the risk of entanglement from the Vineyard Wind fishery studies, not overall entanglement risk within or outside the wind development area.

Second, the Residents claim that the biological opinion ignored the best available science on entanglement risk, which allegedly suggested that construction and operational noise would drive whales into a fishing area ("Area 537") with densely concentrated fishing lines. This enforced shift in whale distribution would, in turn, increase entanglement risk. The Residents assert that this phenomenon was outlined in a memorandum -- which NMFS supposedly neglected -- called the Atlantic Large Whale Take Reduction Team Key Outcomes Memorandum ("TRT Memo").

NMFS considered the broader impact of construction and operational noise on whale distribution patterns. For example, the agency examined whether construction noise would drive whales into parts of Area 537 with more ship traffic. The agency concluded that this was unlikely, given that pile driving is banned during months with high whale density. The same logic applies to the Residents' concern about entanglement risk, because entanglement is most likely in the January—April period when pile driving is banned. The biological opinion also found that noise pollution from the project would not alter the overall distribution of right whales. The Residents do not challenge these clear findings.

Moreover, NMFS did, in fact, review the TRT Memo. And nothing in that memo states that construction or operational noise will drive whales into portions of Area 537 with greater entanglement risk. The memo simply says that NMFS should consider fishing closures in Area 537. So, the Residents' fear about increased entanglement

risk is purely speculative. And NMFS was not required to account for entirely speculative environmental effects that were neither suggested nor supported by the scientific evidence. See 50 C.F.R. § 402.14(h)(iii) (biological opinion must discuss "effects" of proposed action on endangered or threatened species); id. § 402.02 (the "effect" of a proposed agency action is a consequence that is "reasonably certain to occur"); see also Endangered and Threatened Wildlife and Plants; Regulations for Interagency Cooperation, 84 Fed. Reg. 44976, 44993 (Aug. 27, 2019) ("[T]he determination of a consequence to be reasonably certain to occur . . . should not be based on speculation or conjecture."). 14

4.

The Residents then argue that the biological opinion ignores how the Vineyard Wind project will increase the risk of vessel strikes on right whales.

The Residents first argue that the ten-knot restrictions on vessel speed in the wind development area are insufficient, because crew transfer vessels are exempt. But crew transfer vessels must include species observers and

^{14.} After oral argument in this case, the U.S. Fish and Wildlife Service published new regulations revising the definition of "effects of the action" under the ESA. See Endangered and Threatened Wildlife and Plants; Regulations for Interagency Cooperation, 89 Fed. Reg. 24268 (Apr. 5, 2024) (to be codified at 50 C.F.R. pt. 402). But NMFS and BOEM issued their environmental review documents under the prior regulations, which were published in 2019. We therefore limit our analysis to those earlier regulations.

passive acoustic monitoring to survey for nearby whales. If a whale is spotted, the ten-knot speed limit applies to all crew transfer vessels for the rest of the day. And as discussed above, the Residents have supplied no adequate ground on which to challenge the efficacy of passive acoustic monitoring or protected species observers. They therefore cannot demonstrate that NMFS acted arbitrarily by relying on those measures to mitigate the risk of vessel strikes.

The Residents also argue that project noise will drive whales into portions of Area 537 with more vessel traffic. As already discussed, the biological opinion expressly rejected this argument. And this is unsurprising -- it is not even clear that there are areas near the wind development area with substantially higher vessel traffic. Indeed, as the government notes, the "only areas outside of the lease [area] with higher vessel traffic are shipping lanes with commercial traffic located 21 to 30 miles from the project." The Residents do not explain why any project-related noise disturbance would not dissipate well before a whale had swum thirty miles away from the wind development area. Thus, the Residents' concern about project noise increasing vessel strike risk is speculative, and insufficient to support a challenge under the ESA.

C.

The Residents next contend that NMFS failed to consider how the additive effects of the Vineyard Wind project would jeopardize the continued existence of the right whale. Under the implementing regulations of the

ESA, NMFS must "[a]dd the effects of the action and cumulative effects to the environmental baseline and in light of the status of the species and critical habitat, formulate [an] opinion as to whether the action is likely to jeopardize the continued existence of" the listed species. 50 C.F.R. § 402.14(g)(4).

The Residents' briefing on this topic breaks little new ground. Instead, the Residents largely repeat the arguments detailed above, which we have already found unpersuasive. There is only one new argument in the Residents' briefing that might be relevant. The Residents point to language in Quintana-Rizzo, which suggests that widespread wind farm development in southern New England could broadly "affect the use of [the] region by right whales" and influence right whale migration throughout the mid-Atlantic.

These generalized statements do not render the biological opinion's no-jeopardy conclusion arbitrary and capricious. As an initial note, Quintana-Rizzo was describing the potential risks of "[t]he construction and maintenance of hundreds of wind turbines" throughout southern New England. It was not specifically analyzing Vineyard Wind. Also, the Quintana-Rizzo study did not suggest that right whale survival was incompatible with wind energy development. Instead, it urged policymakers to implement comprehensive monitoring and mitigation plans. That is what NMFS did here. And as discussed, the Residents have not demonstrated that the agency's proposed mitigation measures are inadequate, or that reliance on those measures was arbitrary and capricious.

D.

Finally, the Residents argue that BOEM violated NEPA by relying on NMFS's allegedly defective biological opinion. Recall that while an agency may rely on the findings in a biological opinion, such reliance is arbitrary and capricious if (1) the biological opinion is defective, or (2) the agency blindly relies on the biological opinion without conducting its own independent analysis. *See City of Tacoma*, 460 F.3d at 75-76.

Neither criterion is satisfied here. For the reasons discussed above, NMFS's biological opinion was not defective. Therefore, BOEM properly relied on it. *Id.* Moreover, BOEM did not blindly rely on the biological opinion. Instead, BOEM's environmental impact statement includes a lengthy analysis of the Vineyard Wind project's likely effects on right whales. ¹⁵ As a result, we cannot conclude that BOEM's reliance on the NMFS biological opinion violated NEPA. *Id.*

IV.

For the foregoing reasons, the judgment of the district court is *affirmed*.

^{15.} Although the Residents try to challenge portions of that standalone analysis in their reply, they failed to invoke those arguments in their opening brief. So, as discussed above, the Residents' specific challenges to BOEM's environmental impact statement are waived. *See Rife*, 873 F.3d at 19.

APPENDIX B — MEMORANDUM AND ORDER OF THE UNITED STATES DISTRICT COURT OF THE DISTRICT OF MASSACHUSETTS, FILED MAY 17, 2023

UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

Civil Action No. 1:21-cv-11390-IT

NANTUCKET RESIDENTS AGAINST TURBINES AND VALLORIE OLIVER,

Plaintiffs,

v.

U.S. BUREAU OF OCEAN ENERGY MANAGEMENT, et al.,

Defendants,

and

VINEYARD WIND 1 LLC,

Intervenor-Defendant.

May 17, 2023, Decided; May 17, 2023, Filed

MEMORANDUM & ORDER

TALWANI, D.J.

Plaintiffs, Nantucket Residents Against Turbines ("ACK RATs") and Vallorie Oliver, a founding member of ACK RATs, bring this action against the U.S. Bureau of Ocean Energy Management (an agency within the U.S. Department of the Interior) and Deb Haaland in her official capacity as Secretary of the Interior (collectively, "BOEM") and the National Marine Fisheries Service (an agency within the Department of Commerce) and Gina Raimondo in her official capacity as Secretary of Commerce (collectively, "NMFS"). Plaintiffs contend that BOEM and NMFS's decisions approving an offshore wind energy project off the coast of Martha's Vineyard and Nantucket (the "Vineyard Wind Project" or the "Project") was based on inadequate environmental assessments in violation of the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 1421, et seq., the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531, et seq., and the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701-706. This action is one of four pending challenges to the Project in this District.¹

Now before the court are cross-motions for summary judgment by Plaintiffs [Doc. No. 88], Defendants [Doc. No. 95], and Defendant-Intervenor Vineyard Wind 1 LLC ("Vineyard Wind") [Doc. No. 99].

^{1.} See Melone v. Coit et al., 1:21-cv-11171-IT; Seafreeze Shoreside, Inc. et al. v. Dep't of Interior et al., 1:22-cv-11091-IT; Responsible Offshore Development Alliance v. Dep't of Interior et al., 1:22-cv-11172-IT ("the Related Actions").

I. Background Concerning the Project

The following background is drawn from the Administrative Record, as certified by BOEM and NMFS, and is common to all four pending challenges to the Project.

A. BOEM's Development of The Wind Energy Area

In 2009, BOEM began evaluating the possibility of developing wind energy in the Outer Continental Shelf offshore from Massachusetts pursuant to BOEM's authority under the Outer Continental Shelf Lands Act ("OCSLA"), 43 U.S.C. § 1331, et seq. Final Environmental Impact Statement ("Final EIS") Vol. II, BOEM_0068786 at -9170. In December 2010, BOEM published an initial Request for Interest ("RFI") regarding wind energy development in the Outer Continental Shelf offshore from Massachusetts. The RFI also invited public submissions on environmental issues. *Id.*; see also Joint Record of Decision ("Joint ROD"), BOEM_0076799 at -6802 (citing 75 Fed. Reg. 82,055 (Dec. 29, 2010)). In response to comments, BOEM reduced the planning area by 50%. Final EIS Vol. II, BOEM_0068786 at -9170.

In February 2012, BOEM published a Call for Information and Nominations in the Federal Register to gauge interest in commercial leases for wind energy projects. *Id.* (citing 77 Fed. Reg. 5821 (Feb. 6, 2012)). BOEM also published a notice of intent to prepare an environmental assessment in connection with potential

wind energy leases and site assessment activities offshore from Massachusetts. *Id.*

In May 2012, BOEM identified a further reduced area for consideration for potential wind energy development ("the Wind Energy Area") in the Outer Continental Shelf south of Nantucket and Martha's Vineyard, Massachusetts, based on public comments concerning high sea duck concentrations and an area of high-value fisheries. Final EIS Vol. II, BOEM_0068786 at -9170. BOEM then prepared an Environmental Assessment, regarding the proposed Wind Energy Area, to guide its leasing. See 2014 Revised Env't Assessment, BOEM_0000090 at -118.

In June 2014, BOEM issued its Revised Environmental Assessment concerning the proposed wind energy area. *Id.* At the time, BOEM concluded leasing and site assessment actions would not significantly impact the environment. *Id.* at -100.

On June 18, 2014, BOEM published a proposed sale notice and invited public comment on a proposal to sell four wind energy leases in the Wind Energy Area. Final EIS Vol. II, BOEM_0068786 at -9171. Following public comment, BOEM published a final sale notice reflecting its intent to sell commercial wind energy leases in the Wind Energy Area, including Lease "OCS-A 0501." See Final EIS Vol. II, BOEM_0068786 at -9171, -9235.

B. BOEM's Award of the Lease

In January 2015, BOEM conducted a competitive lease sale for Lease OCS-A 0501 (the "Lease"), ultimately

awarding the Lease to Offshore MW, LLC, later renamed Vineyard Wind 1, LLC. Final EIS Vol. II, BOEM_0068786 at -9171. The lease area covers 166,886 acres in the Outer Continental Shelf (the "Lease Area"). *Id.*; April 1, 2015 Lease, BOEM 0000764 at -0776.

The Lease became effective April 1, 2015. *Id.* at BOEM_0000764. The Lease granted Vineyard Wind the right to seek approval for a Site Assessment Plan ("SAP") and a Construction Operations Plan ("COP"). *Id.* On November 22, 2017, Vineyard Wind submitted a Site Assessment Plan ("SAP") to BOEM for the Vineyard Wind Lease Area. May 10, 2018 Approval of SAP, BOEM_0013366. On May 10, 2018, BOEM approved Vineyard Wind's SAP, subject to numerous conditions, including for the protection of cultural resources, marine mammals and sea turtles, and implementation of mitigation measures. *Id.*

C. Biological Review(s) of the Project's Impacts by BOEM and NMFS

1. Environmental Impact Statement(s) prepared by BOEM

On December 19, 2017, Vineyard Wind submitted to BOEM for consideration under OCSLA a proposed COP for the Project to be constructed in 65,296 acres of the Vineyard Wind Lease Area, referred to as the Wind Development Area or "WDA." Dec. 19, 2017 COP Submission Letter, BOEM_0006004-06; December 19, 2017 COP BOEM_0001361-6003. On March 30, 2018, BOEM

published a notice of its intent to prepare an EIS for the COP. 83 Fed. Reg. 13,777 (Mar. 30, 2018), BOEM 0012028. The notice described the Project and invited the public to participate in public comment and public scoping meetings BOEM later conducted. Id.; BOEM 012406-13078 (April 2018 meeting transcripts)). On December 7, 2018, BOEM published a notice of availability of the Draft EIS in the Federal Register. 83 Fed. Reg. 63,184 (Dec. 7, 2018), BOEM 0034694. As summarized in the notice, the Draft EIS analyzed the proposed COP and several alternatives, including different locations for cable landfall, reduction in project size, several options for turbine layout, and a no-action alternative. *Id.* The notice invited public comment and/or participation at public hearings BOEM later conducted. Id.; see also BOEM 035872-36269 (Draft EIS public meeting transcripts).

Vineyard Wind submitted numerous updates to the proposed COP over the course of BOEM's review. See Final EIS Vol. I, BOEM_0068434 at -8440 (listing prior iterations of the COP). The updates addressed comments from BOEM, modified the Project design envelope, and accounted for the possibility of higher capacity wind turbine generators, which would ultimately reduce the number of wind turbines to be installed and reduce the total Project area. See, e.g., Jan. 22, 2021 Letter from Vineyard Wind to BOEM, BOEM_0067698-7701.

On June 12, 2020, BOEM published a notice in the Federal Register that the supplement to the Draft EIS ("Supplemental Draft EIS") was available on BOEM's website, invited public comment in connection with

the notice and participation at public meetings BOEM later held virtually. 85 Fed. Reg. 35,952 (June 12, 2020), BOEM 0057578; June-July 2020 Public Meeting Transcripts, BOEM 058001-59241. BOEM prepared the Supplemental Draft EIS "in consideration of the comments received during the [NEPA] process and in connection with cooperating agencies." Supplemental Draft EIS, BOEM 0056950 at -6954. In particular, BOEM expanded its analysis of the reasonably foreseeable effects from cumulative activities for offshore development, included previously unavailable fishing data, considered a new transit lane alternative through the WDA, and addressed changes to the proposed COP since publication of the Draft EIS. Joint ROD, BOEM 0076799 at -6803-04; 85 Fed. 35,952 (June 12, 2020), BOEM 0057578; Supplemental Draft EIS, BOEM 0056950 at -6954. The transit lane alternative that was included was in response to a proposal from the Responsible Offshore Development Alliance for a northwest/southeast transit corridor to facilitate transit for fishing vessels from southern New England to fishing areas. Supplemental Draft EIS, BOEM 0056950 at -6958.

On December 1, 2020, Vineyard Wind notified BOEM that it was withdrawing the proposed COP from review in order to conduct a technical and logistical review of the turbines selected for inclusion in the final Project design. Dec. 1, 2020 Vineyard Wind Letter to BOEM, BOEM_0067649-50; see also Final EIS Vol. I, BOEM_0068434 at -8440 n.3. Vineyard Wind's notice of withdrawal indicated that Vineyard Wind intended to rescind the withdrawal upon completion of its due

diligence review. Dec. 1, 2020 Vineyard Wind Letter to BOEM, BOEM_0067649-50. On December 16, 2020, following Vineyard Wind's notification that it was withdrawing the COP pending further technical and logistical review, BOEM published a notice in the Federal Register stating that "since the COP has been withdrawn from review and decision-making, there is no longer a proposal for major federal action awaiting technical and environmental review, nor is there a decision pending before BOEM . . . [the] notice advises the public that the preparation of an EIS is no longer necessary, and the process is hereby terminated." Fed. Reg. 81,486 (Dec. 16, 2020), BOEM_0067694.

On January 22, 2021, Vineyard Wind notified BOEM that Vineyard Wind had completed its review and "had concluded that the proposed turbines did not fall outside of the project design envelope being reviewed in the COP" and requested that BOEM resume review of the COP, most recently updated on September 20, 2020. Joint ROD, BOEM 0076799 at -6804.

On March 3, 2021, BOEM published a notice in the Federal Register stating it was resuming preparation of a final environmental impact statement related to the COP. Joint ROD, BOEM_0076799 at -6804. On March 12, 2021, BOEM posted the Final EIS, which consists of 1,600 pages in four volumes assessing the environmental, social, economic, historic, and cultural impacts of the Vineyard Wind Project, from construction to decommissioning, on BOEM's website and issued a notice of availability in the Federal Register. 86 Fed. Reg. 14,153 (Mar. 12, 2021),

BOEM_0071036; see also Final EIS, BOEM_0068434-70061.

2. Biological Opinion

On December 6, 2018, BOEM sent a request to NMFS to conduct a biological consultation pursuant to Section 7 of the ESA. BOEM ESA Consultation Request, BOEM 0034533-4688. BOEM made the request in its capacity as the lead Federal agency in the Section 7 consultation process for the Vineyard Wind Project on behalf of itself, the Army Corps of Engineers ("Corps"), and NMFS Office of Protected Resources ("NMFS/ OPR"). 2021 Biological Opinion, BOEM 0077276 at -7280. On May 1, 2019, NMFS's Greater Atlantic Regional Office ("NMFS/GAR") agreed to initiate formal consultation to consider the effects of the proposed actions on ESA-listed whales, including the North Atlantic right whale, sea turtles, fish, and the critical habitat for various species that may be present in the proposed action area. NMFS Initiation Letter, NMFS 16008. On September 11, 2020, NMFS/GAR issued a biological opinion (the "2020 BiOp") pursuant to its obligations under Section 7(a)(2) of the ESA on behalf of itself, BOEM, NMFS/OPR, and the Corps. Sept. 11, 2020 NMFS BiOp Transmittal Letter to BOEM, NMFS 16027-28; 2020 BiOp, NMFS 16029-354. The 2020 BiOp concluded that the "proposed action may adversely affect but is not likely to jeopardize the continued existence" of the North Atlantic right whales, among other species. Sept. 11, 2020 NMFS BiOp Transmittal Letter, NMFS 16029; 2020 BiOp, NMFS 16029 at -6317.

On May 7, 2021, BOEM requested that NMFS/GAR reinitiate its biological consultation. 2021 BiOp, BOEM_0077276 at -7281; May 7, 2021 Letter from BOEM to NMFS/GAR, BOEM_0076721. On May 27, 2021, NMFS/GAR advised BOEM that it agreed that consultation must be reinitiated and that it anticipated such consultation would result in a new BiOp that would replace the 2020 BiOp. 2021 BiOp, BOEM_0077276 at -7281. The biological consultation was reinitiated to consider (i) the effects of monitoring surveys identified in the Joint ROD by BOEM, at NMFS's recommendation, as conditions of COP approval, which were not considered in the 2020 BiOp, and (ii) new information concerning the status of the right whale. 2021 BiOp Transmittal Mem., NMFS 017683 at -7683-84; BOEM Mem. to Record, BOEM_077788-89.

On October 18, 2021, NMFS/GAR issued the reinitiated BiOp, and on November 1, 2021, NMFS reissued the reinitiated BiOp ("2021 BiOp") with corrections after typos and other non-substantive errors were identified and corrected. See Oct. 18, 2021 NMFS Transmittal Letter to BOEM, NMFS 16668; Nov. 1, 2021 Transmittal Letter, NMFS 17172; 2021 BiOp, BOEM 0077276-7779. The 2021 BiOp supersedes the 2020 BiOp. Nov. 1, 2021 Transmittal Letter, NMFS 17172 at -74; Oct. 18, 2021 NMFS Transmittal Letter to BOEM, NMFS 16668 ("this Opinion replaces the Opinion we issued to you on September 20, 202[0]"). In formulating its biological opinions, NMFS/ GAR considered documents prepared by BOEM, including each iteration of the EIS, Vineyard Wind's proposed COP and updates, BOEM's COP Approval, and the Incidental Harassment Authorization issued by NMFS/OPR,

discussed further below. 2021 BiOp, BOEM_0077276 at -7285-86, -88, -63-64. The 2021 BiOp analyzed the direct and indirect effects of the approved COP, the modifications proposed by BOEM, and those proposed by NMFS/OPR in the IHA. *Id.* NMFS/GAR also updated the 2021 BiOp to reflect the best scientific information available concerning right whales and explain whether any of the new information affected the analysis. Oct. 15, 2021 Transmittal Mem., NMFS 17683 at -86-87.

Like the 2020 BiOp, the 2021 BiOp concludes the proposed action is not likely to jeopardize the continued existence of the right whales. 2021 BiOp, BOEM 0077276 at -7657. Also like the 2020 BiOp, the 2021 BiOp included an incidental take statement ("ITS") and imposed reasonable and prudent measures and their implementing terms and conditions to minimize and document the take of ESA-listed species. 2021 BiOp, BOEM 0077276 at -7657-78; 2020 BiOp, NMFS 16029-354. The 2021 BiOp reflects that NMFS anticipates the incidental take of up to 20 right whales by Level B harassment, harassment that has the potential to "disturb a marine mammal . . . in the wild by causing disruption of behavioral patterns," due to exposure to pile driving noise based on the "maximum impact scenario" for the Project. 2021 BiOp BOEM 0077660-62, -7299. The maximum impact scenario is defined as 90 monopiles being placed in the Wind Development Area, with 12 jackets, at a rate of one pile being driven per day, assuming only 6 decibels of attenuation, or reduction of sound through mitigation measures. 2021 BiOp, BOEM 0077276 at -7660-61. The 2021 BiOp notes that Vineyard Wind may install fewer

turbines and models the corresponding decrease in likely harassment to right whales and other animals. Id. The 2021 BiOp concludes that "neither Vineyard Wind nor NMFS expect[s] serious injury or mortality to result from this activity, and therefore, NMFS has determined that an IHA is appropriate." Id. at -7284; see also id. at -7658 (reflecting in all modeled scenarios that no injury is anticipated with respect to right whales). BOEM and NMFS/OPR each adopted the 2021 BiOp. 2021 BiOp. BOEM 0077276 at -7788; NMFS 3557. The 2021 BiOp concluded, based on all scenarios modeled with 12 decibels sound attenuation, that no right whales would be subject to Level A harassment, which is defined under the Marine Mammal Protection Act ("MMPA") as "harassment" that has the potential to injure a marine mammal. 2021 BiOp, BOEM 0077276 at -7299-300.2 The 2021 BiOp includes an analysis of the effect of Project vessels, estimating that the Project will increase overall vessel traffic by 4.8% during the construction phase and by 1.6% during the operational phase of the Project. Id. at -7508. The 2021 BiOp concludes, based on traffic, combined with mitigation measures and other requirements for project vessels, that it is "extremely unlikely that a project vessel will collide with a whale." Id. at -7527.

On December 1, 2021, NMFS filed a Memorandum for the Record regarding the issuance of the 2021 BiOp,

^{2.} Vineyard Wind did not seek authorization for Level A harassment because it anticipated that that such harassment "will be avoided through enhanced mitigation and monitoring measures proposed specifically for North Atlantic right whales." 2021 BiOp, $\rm BOEM_0077276$ at -7451.

reflecting that the NMFS Permits and Conservation Division (PR1) was adopting the 2021 BiOp. NMFS Mem. to Record, NMFS 3557. On January 20, 2022, BOEM determined, pursuant to 50 C.F.R. § 402.15(a), that "because the activities authorized under BOEM's COP approval—including the monitoring surveys—are subject to the terms and conditions and reasonable and prudent measures found in the 2021 BiOp, no further action is required in order for Vineyard Wind to proceed with construction and operation of the Project." BOEM Information Mem. to Record, BOEM_077788-89.

D. Other Agency Review³

1. Incidental Harassment Authorization

Meanwhile, on September 7, 2018, Vineyard Wind submitted a request under the MMPA to NMFS/OPR for an Incidental Harassment Authorization, seeking authorization of the likely incidental taking by harassment that may occur from impact pile driving in connection with the Project. Draft IHA Application, NMFS 14218-14550; Transmittal Email, NMFS 14451. In October 2018, and then January 2019, Vineyard Wind submitted revised versions of its IHA application to NMFS/OPR.

^{3.} The Vineyard Wind Project was also subject to review by other agencies whose actions were not challenged by Plaintiffs here or in the Related Actions. See Final EIS Vol. II, BOEM_0068786 at -9170-78 (discussing review under several other statutes, including the Coastal Zone Management Act, the National Historic Preservation Act, and the Magnuson-Stevens Fishery Conservation and Management Act).

Transmittal Emails, NMFS 14457, NMFS 14581; January 2019 Draft IHA Application, NMFS 14737-4984. The Vineyard Wind IHA Application was deemed complete on February 15, 2019. 84 Fed. Reg. 18,346 (April 30, 2019), NMFS 3392. Notice inviting public comment on the proposed IHA was published in the Federal Register 74 days later, on April 30, 2019. *Id.* The public comment period closed on May 30, 2019. *Id.*

Approximately two years later, on May 21, 2021, NMFS issued the IHA to Vineyard Wind. May 21, 2021 Letter Issuing IHA, NMFS 3514; IHA, NMFS 3489-3509. On June 25, 2021, NMFS/OPR issued notice of its approval of an IHA under the MMPA, 16 U.S.C. §§ 1361, et seq., NMFS 3415; see also 86 Fed. Reg. 33,810 (June 25, 2021) ("Notice of Issuance of IHA"), NMFS 3515-3556. The notice responded to the public comments NMFS/OPR received, explained the basis for the agency's decision, and described the mitigation, monitoring, and reporting requirements that were imposed by the IHA. Notice of Issuance of IHA, NMFS 3515-3556.

The IHA is valid from May 1, 2023, through April 30, 2024. IHA, NMFS 3489. The IHA authorizes a maximum take by Level B harassment of 20 incidents to right whales. Notice of Issuance of IHA, NMFS 3515 at -3551. The Notice of Issuance defines Level B Harassment as "the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering." Notice of Issuance of IHA, NMFS 3515 at -3532; see also 50 C.F.R. § 216.3.

2. Clean Air Act Permits

On August 17, 2018, Vineyard Wind applied to the U.S. Environmental Protection Agency ("EPA") for a permit under the Clean Air Act concerning construction of a wind farm. 2021 BiOp, BOEM_0077276 at -7282-83. On April 19, 2019, Vineyard Wind submitted a subsequent application for an operating permit in accordance with 310 C.M.R. 7.00. *Id.* On June 28, 2019, the EPA issued a draft permit for public comment. *Id.* On May 19, 2021, the EPA issued a permit to Vineyard Wind. *Id.*

3. Rivers and Harbors & Clean Water Act Permits

On December 26, 2018, the Corps issued a public notice in the Federal Register regarding proposed permits under the Rivers and Harbors Act and Section 404 of the Clean Water Act, to permit Vineyard Wind to construct, maintain, and eventually decommission an 800 megawatt wind energy facility, two electronic service platforms, scour protection around the bases of the wind turbine generators and electronic service platforms, connection between the turbines and the service platforms, and two export cables with scour protection within a single 23.3 mile long corridor. Joint ROD, BOEM 0076799 at -6803, -6807. The public comment period ran from December 26, 2018, to January 18, 2019. Joint ROD, BOEM 0076799 at -6828. The Corps did not receive any comments from the public during or after the public comment period. Id. The Corps issued a permit, with special conditions, to Vineyard Wind on August 9, 2021. 2021 BiOp, BOEM 0077276 at -7282.

E. The Approved Vineyard Wind Project

On May 10, 2021, BOEM, NMFS, and Corps issued a Joint ROD adopting the Final EIS. Joint ROD, BOEM_0076799-898. The Joint ROD consolidated the records of decision by each respective agency, specifically, BOEM's action to approve the COP under OCSLA, the Corps' issuance of permits under the Clean Water Act and Rivers and Harbors Act, and NMFS/OPR's issuance of an IHA under the MMPA. Joint ROD, BOEM_0076799-898. The Joint ROD reflects that BOEM's approval of the COP would be subject to mitigation and monitoring measures outlined in the Final EIS and any additional technical, navigational, and safety conditions imposed by BOEM. Joint ROD, BOEM_0076799 at -6820-21, -6827.

On July 15, 2021, BOEM issued final approval of Vineyard Wind's COP under OCSLA. July 15, 2021 VWI COP Project Easement and Approval Letter ("COP Approval Letter"), BOEM 0077150-265. The Project, as approved, will involve 84 or fewer wind turbines to be installed in 100 of the locations proposed by Vineyard Wind in the Wind Development Area, in an east-to-west orientation, with a minimum spacing of 1 nautical mile each. Joint ROD, BOEM 0076799 at -6821. The Project is located approximately 14 nautical miles south of Nantucket Island and Martha's Vineyard at its nearest point. Final EIS Vol. II, BOEM 0068786 at -8863. As part of construction of the Project, project-related vessels will travel primarily from New Bedford, Massachusetts, approximately fifty miles from the WDA, although some vessel trips will originate in Canadian ports. 2021 BiOp, BOEM 0077276 at -7294.

BOEM's final approval is subject to numerous terms and conditions, including compliance with all "statutes, regulations, and permits and authorizations issued by Federal and state agencies for the [P]roject." COP Approval Letter, BOEM 077150 at -152. The COP Approval Letter also noted that all activities authorized thereunder by BOEM "will be subject to any terms and conditions and reasonable and prudent measures resulting from a BOEM-reinitiated consultation for the Project's BiOp." COP Approval Letter, BOEM 077150 at -7152. The IHA set forth a number of minimization and monitoring measures, which were incorporated into the conditions of the COP Approval and set forth in the 2021 BiOp. IHA, NMFS 3489-3509. Numerous other measures were laid out in the Joint ROD pertaining to right whales and other ESA-listed animals. See Joint ROD, Appendix A, BOEM 0076852-897. The mitigation measures include:

- 1. Seasonal restriction on pile driving. Pile driving is not permitted from January 1 through April 30 to avoid the time of year with highest densities of right whales in the Project Area. Pile driving is not permitted in December, except in the event of unanticipated delays, and will require enhanced protection measures and approval by BOEM. 2021 BiOp, BOEM_0077276 at -7451-52; IHA, NMFS 3489 at -3490.
- 2. **A "soft start" pile driving procedure.** Vineyard Wind will begin pile driving activities with three rounds of three impact hammer strikes at a reduced energy, each followed by a one-minute

waiting period. Vineyard Wind will use this "soft start" approach for each pile to be driven at the beginning of a day's pile driving activities, and at any point where pile driving has ceased for thirty minutes or longer. 2021 BiOp, BOEM_0077276 at -7458. This "soft start" procedure is designed to "provide a warning to any marine mammals" and the opportunity to disperse from the area prior to higher intensity pile driving, to reduce the change of Level A or Level B harassment of right whales. 2021 BiOp, BOEM_0077276 at -7458.

Although NMFS expects soft-start procedures to reduce the effects of pile driving on right whales, NMFS was unable to modify the estimated taken numbers to account for such benefit because NMFS could not predict the extent to which soft start would reduce exposure. 2021 BiOp, BOEM 0077276 at -7458.

3. The use of protected species observers. Vineyard Wind must employ qualified, trained protected species observers ("PSOs") to conduct monitoring for marine mammals during pile driving activity. These individuals must be approved by NMFS and are subject to certain conditions, including that they must be independent observers, rather than construction personnel. IHA, NMFS 3489 at -3499-3500. At least two PSOs must be stationed on the pile driving vessel at all times sixty minutes prior to, during, and thirty minutes after pile driving. IHA, NMFS 3489 at -3490.

- 4. Passive Acoustic Monitoring & Other Reporting. Passive Acoustic Monitoring ("PAM") will be used "record ambient noise and marine mammal vocalizations in the [L]ease [A]rea before, during, and after [construction] to monitor project impacts relating to vessel noise, pile driving noise, [wind turbine] operational noise, and to document whale detections in the WDA." 2021 BiOp, BOEM_0077276 at -7298. PAMgenerated noise data must be interpreted by an expert trained to discern the species of whale making sounds detected. *Id*.
- 5. The establishment of pile driving clearance zones. Vineyard Wind PSOs must establish clearance zones for right whales between sixty minutes prior pile driving activities and thirty minutes after completion of pile driving activities. The clearance zones range depending on the time of year from 2-10 km for visual and 5-10 km for PAM. Zones are the smallest from June to December 31, when the BiOp concludes there is a lower probability of right whales being present in the pile driving area. 2021 BiOp, BOEM_0077276 at -7319.

Vineyard Wind vessels must also use all other available sources of information on right whale presence, including the Right Whale Sightings Advisory System, WhaleAlert app, and monitoring of Coast Guard channels to plan vessel routes. IHA, NMFS 3489 at -3496.

- 6. **Vessel Speed Restrictions**. Vessels must comply with the NOAA Ship Strike Rules' speed restrictions, that restrict speed to 10 knots in certain restricted zones. IHA, NMFS 3489 at -3497; see also 2021 BiOp, BOEM_0077276 at -7520. All vessels travelling over 10 knots must have a dedicated visual observer on duty at all times, such as a PSO or crew member. IHA, NMFS 3489 at -3496. Where a crew transfer vessel is not subject to the 10-knot speed limit, it must employ an additional PSO or other enhanced detection method to monitor for right whales, in addition to PAM. *Id.* at -3497.
- 7. Heightened Measures in Dynamic Management Areas and Slow Zones. Dynamic Management Areas ("DMA"), as defined by the 2008 NOAA Ship Strike Rules (73 Fed. Reg. 60,173), are temporary protection zones designed to reduce lethal right whale strikes and are triggered when three or more whales are sighted within 2-3 miles of each other outside of the seasonal protection zones, See 2021 BiOp, BOEM 0077276 at -7675. NMFS adopted an additional protective measure, referred to as Right Whale Slow Zones, based on acoustical detection of a vocalizing right whale. When a right whale is detected acoustically, notifications of a "Slow Zone," covering a protective circle with a radius of 20 nautical miles from any point of detection, are triggered. Id.; see also NOAA Fisheries, Help Endangered Whales: Slow Down in Slow Zones (Dec. 23,

2021) available at https://www.fisheries.noaa. gov/feature-story/help-endangered-whales-slow-down-slow-zones. In instances where a DMA or Slow Zone has been triggered, NMFS requires that Vineyard Wind use an increased number of PSOs, and establish an extended exclusion zone with PAM, in addition to other restrictions established by the rules pertaining to DMAs and Slow Zones. 2021 BiOp, BOEM_0077276 at -7675.

As the 2021 BiOp acknowledges, numerous mitigation measures are designed not only to protect right whales from harassment, but also to protect other species. For instance, Vineyard Wind is required to implement PSOs for several species of sea turtles, and the soft-start pile driving procedures are designed to disperse any undetected sea turtles, right whales, and other marine species from the Area. See 2021 BiOp, BOEM_0077276 at -7480-82, -7458.

II. Factual Record as to Plaintiffs' Standing

A. Plaintiff Vallorie Oliver

Plaintiff Vallorie Oliver is a lifelong resident of Nantucket Island. Joint Statement of Undisputed Facts ("Joint SOF") ¶ 3 [Doc. No. 118]; Decl. of Vallorie Oliver in Supp. of Pls. Mot. for Summ. J. ("Oliver Decl.") ¶ 3 [Doc. No. 88-2]. Oliver founded Plaintiff ACK RATs in 2018 and serves as its president. Joint SOF ¶ 4 [Doc. No. 118]; Oliver Decl. ¶ 2 [Doc. No. 88-2]. Oliver enjoys the opportunity to observe marine animals in their natural habitat, *Oliver*

Decl. ¶3 [Doc. No. 88-2], and has seen right whales in the waters around Nantucket, including "water potentially affected by the proposed Vineyard Wind [P]roject," Supplemental Declaration of Vallorie Oliver in Support of Plaintiffs' Motion for Summary Judgment and in Opp. to Cross-Motions for Summary Judgment ("Oliver Suppl. Decl.") ¶ 4 [Doc. No. 108]. Oliver has "concrete" plans to observe right whales in the waters around Nantucket in the future, id., but has provided no details regarding those plans. Oliver states that, were any harm to come to right whales because of the Project, she would feel she has failed in her duty to protect them. Oliver Decl. ¶3 [Doc. No. 88-2]. Oliver states further that she would suffer "ecological grief" were she to hear about the loss of even

^{4.} Defendants and Vineyard Wind challenge this statement as "vague and not substantiated with evidence of Ms. Oliver traveling to the Project Area." Fed. Defs. Resp. to Pls. Suppl. Separate Statement of Undisputed Facts ¶3 [Doc. No. 113]; Vineyard Wind Resp. to Pls. Suppl. Separate Statement of Undisputed Facts ¶3 [Doc. No. 116]. However, where Oliver's Supplemental Declaration states, under oath, that she has direct knowledge of the facts set forth therein, the court takes her unrebutted statements of fact as true for purposes of summary judgment.

^{5.} Defendants and Vineyard Wind dispute Oliver's statement "as conclusory and unsupported by credible evidence" where she has not identified any such plans. See Fed. Defs. Resp. to Pls. Suppl. Separate Statement of Undisputed Facts ¶ 4 [Doc. No. 113]; Vineyard Wind Resp. to Pls. Suppl. Separate Statement of Undisputed Facts ¶ 4 [Doc. No. 116]. Again, however, where Oliver's Supplemental Declaration states, under oath, that she has direct knowledge of the facts set forth therein, the court takes her unrebutted statements of fact as true for purposes of summary judgment.

one right whale to the Project. Oliver Suppl. Decl. ¶8 [Doc. No. 108]. Oliver states that she would similarly experience "heartsickness" if the Project's pile driving activities were to cause hearing damage to any right whales or force the right whales outside of the construction zone and towards other threats. Oliver Suppl. Decl. ¶9 [Doc. No. 108].

Oliver states that her respiratory health will be affected because the Project's emissions will affect the entire southeastern Massachusetts region, including Nantucket, where Oliver lives, as well as Barnstable and New Bedford, Massachusetts, where Oliver frequently visits. Oliver Suppl. Decl. ¶ 12 [Doc. No. 108]. Oliver states that she will also be affected by the increase in greenhouse gas emissions caused by the Project because they may exacerbate climate change as experienced on and near Nantucket. Oliver Suppl. Decl. ¶ 13 [Doc. No. 108].

B. Plaintiff Nantucket Residents Against Turbines (ACK RATs)

ACK RATs is a non-profit organization incorporated in Massachusetts. Joint SOF ¶ 1 [Doc. No. 118]. ACK RATs' members include Oliver and non-party Amy DiSibio.

DiSibio, joined ACK RATs in 2021 and serves on the Organization's board of directors. Joint SOF ¶ 5 [Doc. No. 118]; Decl. of Amy DiSibio in Supp. of Pls. Mot. for Summ. J. ("DiSibio Decl.") ¶ 3 [Doc. No 88-3]. DiSibio owns a home on Nantucket Island. DiSibio Decl. ¶ 2 [Doc. No. 88-3]. DiSibio and her family have been visiting Nantucket for more than thirty years. *Id.* DiSibio enjoys

the opportunities to observe marine mammals in their natural habitat surrounding Nantucket. *Id.* ¶ 4. DiSibio and her family enjoy whale watching off Nantucket. *Id.* DiSibio states that she feels a responsibility to protect the right whale from damage that could be caused by the Vineyard Wind Project. *Id.*

Plaintiffs have not identified any members of ACK RATs other than Oliver and DiSibio and has not provided any other information about its members. Joint SOF ¶ 10 [Doc. No. 118].

III. Procedural Background

Plaintiffs ACK RATs and Vallorie Oliver notified Defendants of their intent to sue on May 27, 2021, and instituted this action on August 27, 2021. Complaint [Doc. No. 1]. On November 27, 2021, Plaintiffs submitted the revised 60-Day Letter to the Defendants ("60-Day Letter"). [Doc. No. 96-3]. Two days later, Plaintiffs submitted a supplement to the 60-Day Letter regarding the 2021 BiOp's purported failure to identify or describe any existing "take" authorizations for numerous listed species in the section discussing the Environmental Baseline for the Project. [Doc. No. 96-4].

On January 7, 2022, the court granted Vineyard Wind's motion to intervene. Jan. 7, 2022 Mem. and Order [Doc. No. 54]; see also Vineyard Wind Mot. to Intervene [Doc. No. 11].

On February 10, 2022, Plaintiffs filed an amended complaint. First Amended Complaint [Doc. No. 59].

Plaintiffs claim that NMFS acted arbitrarily, capriciously, and unlawfully in issuing the 2021 BiOp in violation of ESA Section (7)(a)(2) by failing to adequately consider the Project's impact on North Atlantic right whales, including by failing to engage in the "best available" science with respect to right whales as required by the ESA. First Amended Complaint ¶¶ 71-73 [Doc. No. 59]. Plaintiffs further contend that both NMFS and BOEM violated and continue to violate Section 7(a)(2) of the ESA by failing to ensure through consultation that BOEM's approval of impacts of the Project will not jeopardize the right whale. First Amended Complaint ¶¶ 75-76 [Doc. No. 59]. Finally, Plaintiffs claim that BOEM violated NEPA by failing to take the requisite "hard look" at the environmental consequences of the Project, both as to the right whales and as to the air quality and emissions impacts, instead issuing a Final EIS that reflected many of the same claimed procedural and substantive defects as the 2021 BiOp. First Amended Complaint ¶¶ 7, 67-69 [Doc. No. 59].6

Defendants certified the Administrative Record on April 11, 2022, Fed. Defendants' Notice of Filing Certified Indices to Administrative Records [Doc. No. 71], and filed Addenda on May 19, 2022, June 13, 2022, and July 1, 2022, Fed. Defendants' Notices of Filing Certified Index

^{6.} Plaintiffs have waived several additional claims by failing to raise them in their summary judgment papers, including that Defendants violated NEPA by failing to consider the cultural and aesthetic impacts of the Project and any ESA or NEPA claims as to animals other than right whales. *Compare* First Amended Complaint ¶¶ 7, 67-68 [Doc. No. 59], *with* Pls. Mem. in Support of Summary Judgment ("Pls. Mem.") at 6-7, 43-49 [Doc. No. 89].

to NMFS Administrative Record Addenda [Doc. Nos. 75, 76, 78, 83]. The parties' pending cross-motions and consolidated briefing followed. [Docs Nos. 88-89, 92, 95-96, 98-102, 105-109, 112-118, 127].

IV. Standard of Review

Under Federal Rules of Civil Procedure 56(a), summary judgment is appropriate when "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." A fact is material when, under the governing substantive law, it could affect the outcome of the case. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 106 S. Ct. 2505, 91 L. Ed. 2d 202 (1986); *Baker v. St. Paul Travelers, Inc.*, 670 F.3d 119, 125 (1st Cir. 2012). A dispute is genuine if a reasonable jury could return a verdict for the non-moving party. *Anderson*, 477 U.S. at 248.

The moving party bears the initial burden of establishing the absence of a genuine dispute of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S. Ct. 2548, 91 L. Ed. 2d 265 (1986). This burden can be satisfied in two ways: (1) by submitting affirmative evidence that negates an essential element of the non-moving party's claim or (2) by demonstrating that the non-moving party failed to establish an essential element of its claim. *Id.* at 331. Once the moving party establishes the absence of a genuine dispute of material fact, the burden shifts to the non-moving party to set forth facts demonstrating that a genuine dispute of material fact remains. *Anderson*, 477 U.S. at 255-56.

The non-moving party cannot oppose a properly supported summary judgment motion by "rest[ing] on mere allegations or denials of [the] pleadings." *Id.* at 256. Disputes over facts "that are irrelevant or unnecessary" will not preclude summary judgment. *Anderson*, 477 U.S. at 248. When reviewing a motion for summary judgment, the court must take all properly supported evidence in the light most favorable to the non-movant and draw all reasonable inferences in the non-movant's favor. *Griggs-Ryan v. Smith*, 904 F.2d 112, 115 (1st Cir. 1990). "Credibility determinations, the weighing of evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge . . . ruling on a motion for summary judgment." *Anderson*, 477 U.S. at 255.

The fact that the parties have filed cross motions does not alter these general standards; rather the court reviews each party's motion independently, viewing the facts and drawing inferences as required by the applicable standard, and determines, for each side, the appropriate ruling. See Wightman v. Springfield Terminal Ry. Co., 100 F.3d 228, 230 (1st Cir. 1996) (noting that cross-motions for summary judgment do not "alter the basic Rule 56 standard" but rather require the court "to determine whether either of the parties deserves judgment as a matter of law on facts that are not disputed").

V. Standing

The court begins with a threshold jurisdictional issue. Defendants and Vineyard Wind contend that Plaintiffs have failed to establish that they will suffer a concrete

injury and thus lack standing. Plaintiffs contend that declarations provided by Plaintiff Vallorie Oliver, [Doc. Nos. 88-2 108], and non-party Amy DiSibio [Doc. No. 88-3] are sufficient to establish standing on summary judgment.

A. Applicable Law

The doctrine of standing is rooted in Article III of the Constitution, which confines federal courts to the adjudication of actual "cases" and "controversies." See U.S. Const. Art. III, § 2, cl. 1; Lujan v. Defs. of Wildlife, 504 U.S. 555, 560-61, 112 S. Ct. 2130, 119 L. Ed. 2d 351 (1992). Standing consists of three elements: "[t]he plaintiff must have (1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that is likely to be redressed by a favorable judicial decision." Spokeo, Inc. v. Robins, 578 U.S. 330, 338, 136 S. Ct. 1540, 194 L. Ed. 2d 635 (2016), as revised (May 24, 2016) (quoting *Defs. of Wildlife*, 504 U.S. at 560-61). "The standing inquiry is claim-specific: a plaintiff must have standing to bring each and every claim that she asserts." Katz v. Pershing, LLC, 672 F.3d 64, 71 (1st Cir. 2012) (citing Pagan v. Calderon, 448 F.3d 16, 26 (1st Cir. 2006)).

To establish the first element of standing, an injury-infact, a plaintiff must demonstrate "an invasion of a legally protected interest" that is "concrete and particularized" and "actual or imminent, not conjectural or hypothetical." *Defs. of Wildlife*, 504 U.S. at 560. "The particularization element of the injury-in-fact inquiry reflects the commonsense notion that the party asserting standing must not only allege injurious conduct attributable to the

defendant but also must allege that he, himself, is among the persons injured by that conduct." *Hochendoner v. Genzyme Corp.*, 823 F.3d 724, 731-32 (1st Cir. 2016).

Standing also requires causation and redressability, which "'overlap as two sides of a causation coin." *Carpenters Indus. Council v. Zinke*, 854 F.3d 1, 6 n.1, 428 U.S. App. D.C. 243 (D.C. Cir. 2017) (quoting *Dynalantic Corp. v. Dep't of Def.*, 115 F.3d 1012, 1017, 325 U.S. App. D.C. 109 (D.C. Cir. 1997)). "[I]f a government action causes an injury, enjoining the action usually will redress that injury." *Id.*⁷

An association cannot establish standing to sue on behalf of its members unless "at least one of [its] members possesses standing to sue in his or her own right." *United States v. AVX Corp.*, 962 F.2d 108, 116 (1st Cir. 1992). An association must also establish that the interests at stake are germane to the organization's purpose, and that "neither the claim asserted nor the relief requested requires individual members' participation in the lawsuit." *Friends of the Earth, Inc. v. Laidlaw Environ. Servs.* (TOC), Inc., 528 U.S. 167, 169, 120 S. Ct. 693, 145 L. Ed. 2d 610 (2000).

Because standing is not a "mere pleading requirement[] but rather an indispensable part of the plaintiff's case," standing must be supported "with the manner and degree of evidence required at the successive stages

^{7.} Neither Defendants nor Vineyard Wind challenge causation or redressability on summary judgment.

of the litigation." Defs. of Wildlife, 504 U.S. at 561; see also People to End Homelessness v. Develco Singles Apartments Assoc., 339 F.3d 1, 8 (1st Cir. 2003). While at the pleadings stage, "general factual allegations of injury" may suffice, and at summary judgment, such allegations must be supported by affidavits which will be taken to be true, where standing remains a controverted issue at trial, the specific facts establishing standing "must be 'supported adequately by the evidence adduced at trial." Id. (quoting Gladstone Realtors v. Village of Bellwood, 441 U.S. 91, 114, 115 n.31, 99 S. Ct. 1601, 60 L. Ed. 2d 66 (1979)).

B. Endangered Species Act Claim

Plaintiffs point to several interests they contend are sufficient to establish injury-in-fact for standing purposes under the ESA. First, Plaintiffs contend that both Oliver and DiSibio have deep connections to the right whales and their preservation by way of their long-established ties to Nantucket. Pls. Mem. of Points and Authorities in Opp. to Cross-Motions; Pls. Reply in Supp. of Mot. for Summ. J. ("Pls. Opp.") 11-13 [Doc. No. 105] (citing Oliver and DiSibio Decls.). Second, Plaintiffs point to the degrees of emotional distress each woman attests she would experience if any right whales were harmed or killed as a result of the Project. Pls. Opp. 12, 14-16 [Doc. No. 105]; Oliver Decl. ¶¶ 2-3 [Doc. No. 88-2]; Oliver Suppl. Decl. ¶¶ 8-9 [Doc. No. 108]; DiSibio Decl. ¶ 4 [Doc. No. 88-3]. Oliver contends that she has seen right whales in the past and that she has "concrete plans" to view them in the future. Oliver Suppl. Decl. ¶ 9 [Doc. No. 108]. DiSibio

states recreational and aesthetic interest in the right whale. *See* DiSibio Decl. ¶ 4 [Doc. No. 88-3] ("My family and I enjoy whale watching off Nantucket"). Defendants, joined by Vineyard Wind, contend that Oliver and DiSibio do not provide specific facts to reflect that either has the "requisite environmental or aesthetic interest in right whales" because neither offers the kind of "concrete plans" required under *Defenders of Wildlife*, 504 U.S. at 565.

The citizen-suit provision of the ESA grants "any person" the authority to commence a civil suit in to enforce a violation of any provision of the ESA. 16 U.S.C. § 1540 (g) (1). This "authorization of remarkable breadth" abrogates the traditional prudential limitation that "a plaintiff's grievance must arguably fall within the zone of interests protected or regulated by the statutory provision or constitutional guarantee invoked in the suit." Bennett v. Spear, 520 U.S. 154, 162-164, 117 S. Ct. 1154, 137 L. Ed. 2d 281 (1997). Nonetheless, Article III of the Constitution requires that a party filing suit under the ESA state not only an injury-in-fact but that "the party seeking review be himself among the injured." Sierra Club v. Morton, 405 U.S. 727, 735, 92 S. Ct. 1361, 31 L. Ed. 2d 636 (1972). Plaintiffs must present more than "general averments' and 'conclusory allegations," Friends of the Earth, Inc., 528 U.S. at 168-69 (quoting Lujan v. Nat'l Wildlife Fed'n, 497 U.S. 871, 888, 110 S. Ct. 3177, 111 L. Ed. 2d 695 (1990)), or "some day intentions' to visit endangered species halfway around the world," Id. (quoting Defs. of Wildlife, 504 U.S. at 564).

Plaintiff Vallorie Oliver's Claimed Injuriesin-Fact

Certain of Oliver's claimed injuries are more concrete than others. First, Oliver's strong ties to Nantucket and the ecosystem are not, in and of themselves, sufficient. Proximity does not equate to injury. See Nat'l Wildlife Fed'n, 497 U.S. at 887 (holding that an alleged injury was insufficient to establish standing where the plaintiffs did not use land in the area affected by the challenged activity but instead only roughly "in the vicinity" of the affected land).

Likewise, Oliver's anticipated ecological grief is insufficient. See Humane Soc. of United States v. Babbitt, 46 F.3d 93, 98-99, 310 U.S. App. D.C. 228 (D.C. Cir. 1995) (collecting cases). "[G]eneral emotional harm, no matter how deeply felt, cannot suffice for injury-in-fact for standing purposes." Id.; see also Strahan v. Sec'y, Mass. Exec. Office of Energy & Envtl. Affairs, 2021 U.S. Dist. LEXIS 259688, 2021 WL 9038570, at *8 (D. Mass. Nov. 30, 2021) ("injury-in-fact may not be established by [Plaintiffs'] 'sincere and passionate interest in the wellbeing of the whales alone."). Even if emotional distress were sufficient, Oliver's statements are too speculative. Oliver states that if right whales are killed or injured through vessel-related strikes or other means related to the Project the news of this loss would be "psychologically devastating" and she would suffer "ecological grief." Oliver Suppl. Decl. ¶¶ 8-9 [Doc. No. 108]. Defendants rightly describe this as a "contingent future mental health injury" for which she offers no support. See Fed. Defs. Resp. to

Pls. Suppl. Separate Statement of Undisputed Facts ¶ 9 [Doc. No. 113]. The risk of this injury is dependent on the occurrence of a future event—the death or serious injury of North Atlantic right whales *because* of the Project—and is contradicted by evidence in the Administrative Record that the Project is unlikely to cause the death of any right whale. *See*, *e.g.*, 2021 BiOp, BOEM 0077276 at -7657.

Oliver's final stated interest, that she has seen right whales in the past and has "concrete plans" to observe them in the future, is marginally sufficient. Defendants and Vineyard Wind contend that more is required under *Defenders of Wildlife*. Fed. Defs. Reply 3-5 [Doc. No. 114]; Vineyard Wind Reply in Support of Its Mot. for Summ. J. ("Vineyard Wind Reply") 2-3 [Doc. No. 115]. While Defendants and Vineyard Wind are correct that *Defenders of Wildlife* required more than "some day intentions," they overlook the context and limits of that holding.

In *Defenders of Wildlife*, the plaintiff organization challenged the decision by two agencies to limit ESA Section 7(a)(2) consultation to actions taken in the United States or on the high seas, contending that their members would be harmed by the risk to endangered and threatened species abroad. 504 U.S. at 558-559. To support standing, two members put forth affidavits professing their intent to return to foreign countries to observe threatened species. *Id.* One member put forth an affidavit stating she "intend[s] to return to Sri Lanka," but when subsequently deposed, she stated that she had no current plans to return, adding that "[t]here is a civil war going on right now. I don't know. Not next year, I

will say. In the future." *Id.* at 563-4 (quoting deposition testimony). It is in this context that the Court rejected "affiants' profession of an intent to return to places they had visited before—where they will presumably, this time, be deprived of the opportunity to observe animals of the endangered species," holding that "[s]uch 'some day' intentions" are "simply not enough." *Id.* at 564.

Unlike *Defenders of Wildlife*, there are no speculative statements about trips to far-flung destinations here. Instead, it is undisputed that Oliver lives on Nantucket Island, in the vicinity of coastal waters that right whales frequent. See Joint SOF ¶ 3 [Doc. No. 118]. It is also undisputed that Oliver has seen right whales in the past. See Fed. Defs. Resp. to Pls. Suppl. Separate Statement of Undisputed Facts ¶ 4 [Doc. No. 113]; Vineyard Wind Resp. to Pls. Suppl. Separate Statement of Undisputed Facts ¶ 4 [Doc. No. 116]. And where Defendants did not offer deposition testimony or any other evidence to counter Oliver's assertion, the court finds Oliver's unrebutted statement that she has "concrete plans to observe right whales in the waters around Nantucket in the future," Oliver Suppl. Decl. ¶ 4 [Doc. No. 108], a sufficiently "concrete and particularized" legally protected interest to establish an injury-in-fact.

Oliver has thus put forth sufficient facts to establish injury for purposes of summary judgment. No party challenges causation or redressability. Therefore, Defendants and Vineyard Wind's standing challenges to Oliver's ESA claims fail.

2. Plaintiff ACK RATs

Because Oliver has put forth sufficient facts to establish injury for purposes of summary judgment and was a member of ACK RATs at the time the suit was filed, ACK RATs has also established such injury for purposes of summary judgment. See Friends of the Earth, Inc., 528 U.S. at 168-69. It is undisputed that the interests at stake are germane to ACK RATs' purpose. Friends of the Earth, Inc., 528 U.S. at 168-69. Moreover, neither the claims asserted, nor the relief requested require the participation of individual members. Id. Accordingly, Defendants' and Vineyard Wind's standing challenge on summary judgment as to ACK RATs' ESA claims fail.8

C. National Environmental Policy Act Claims

Plaintiffs assert that they have also established Plaintiffs' injury-in-fact as to the NEPA claims. Pls. Mem. and Points of Authorities in Supp. of Mot. for Summ. J. ("Pls. Mem.") 12 [Doc. No. 89]; Pls. Opp. 17-21 [Doc. No. 105]. Defendants maintain that Plaintiffs cannot establish a concrete injury, let alone a procedural injury, and thus

^{8.} The court's finding does not rely on Amy DiSibio's Declaration where DiSibio did not establish that she was a member of ACK RATs on the date this action was initiated. As a result, her statements do not change the standing analysis. See LA Alliance for Human Rights v. County of Los Angeles, 14 F.4th 947, 959 n.9 (9th Cir. 2021) (rejecting Plaintiffs' attempt to remedy a standing defect where it had not alleged that supplemental declarations were offered by members who had joined the plaintiff organization prior to date the suit was filed).

lack standing for any of their claims. See Fed. Defs. Reply 2-5 [Doc. No. 114]. Vineyard Wind argues further that Plaintiffs' evidence as to standing for the NEPA claims fails where Plaintiffs offered no expert testimony or other similar supporting evidence as to air quality impacts. Vineyard Wind Mem. in Supp. of Summ. J. ("Vineyard Wind Opening Mem.") 3-6 [Doc. No. 100]; Vineyard Wind Reply 3-6 [Doc. No. 115].

NEPA "does not mandate particular results, but simply prescribes the necessary process." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350, 109 S. Ct. 1835, 104 L. Ed. 2d 351 (1989). Where a plaintiff seeks "to enforce a procedural requirement the disregard of which could impair a separate concrete interest of theirs," the plaintiff can establish standing "without meeting all the normal standard for redressability and immediacy." Defs. of Wildlife, 504 U.S. at 572 & n.7. But this less demanding showing for redressability and immediacy does not relieve the plaintiff of the requirement to demonstrate an injuryin-fact. AVX Corp., 962 F.3d at 119. Plaintiffs must "show that 'the government act performed without the procedure in question [here, sufficient NEPA review] will cause a distinct risk to a particularized interest of the plaintiff." Town of Winthrop v. F.A.A., 535 F.3d 1, 6 (1st Cir. 2008) (quoting City of Dania Beach v. F.A.A., 485 F.3d 1181, 1185, 376 U.S. App. D.C. 151 (D.C. Cir. 2007)) (brackets in original). "[P]rudential standing requirements may be satisfied so long as 'the plaintiff's interests are [not] so marginally related to or inconsistent with the purposes implicit in the statute that it cannot reasonably be assumed that Congress intended to permit the suit."

Nulankeyutmonen Nkihtaqmikon v. Impson, 503 F.3d 18, 30 (1st Cir. 2007) (quoting Dennis v. Higgins, 498 U.S. 439, 461, 111 S. Ct. 865, 112 L. Ed. 2d 969 (1991)).

1. Plaintiffs' NEPA Claim as to the Right Whales

Where Plaintiffs have alleged a sufficient injury-infact as to maintain their ESA claims, that injury-in-fact is sufficiently particularized to maintain Plaintiffs' NEPA claims concerning right whales. For NEPA standing, Plaintiffs need only demonstrate a particularized injury-in-fact that is not "so marginally related to or inconsistent with" NEPA that it cannot be assumed that Congress intended to permit Plaintiffs' lawsuit. Here, Plaintiffs have a particularized interest in right whales, which is not so marginally related to NEPA review of the Vineyard Wind Project as to preclude standing.

Accordingly, Defendants and Vineyard Wind's standing challenges to Plaintiffs' NEPA claim regarding right whales fail.

2. Plaintiffs' NEPA Claim as to Air Quality/ Emissions Concerns

Vineyard Wind contends that Plaintiffs have provided insufficient evidence to demonstrate a concrete injury with respect to the Project's potential air emissions or contributions to greenhouse gases, *Vineyard Wind Opening Mem.* 4-5 [Doc. No. 100], pointing to Plaintiffs' lack of expert testimony regarding air quality, as well as

the ultimate conclusions of the Final EIS, which reflect that the air quality impacts of the Project are (1) not anticipated to impact Nantucket residents, (2) are likely to be "negligible to minor" and "minor to beneficial," and (3) the anticipated impacts are not expected to exceed the applicable National Ambient Air Quality Standards. *Id.* at 5-6; *see also Joint SOF* ¶¶ 162-164 [Doc. No. 118].

Plaintiffs respond that Vineyard Wind has set the bar for standing under NEPA claims too high, pointing to Hall v. Norton, 266 F.3d 969 (9th Cir. 2001), as instructive of their burden. Pls. Opp. 18-19 [Doc. No. 105]. In Hall, the plaintiff, a resident of Las Vegas, Nevada, brought NEPA and Clean Air Act claims against the U.S. Bureau of Land Management over its decision to exchange land with a private developer after estimating that the proposed development in the Law Vegas Valley would generate increased emissions in an area already not in attainment with federal air-quality standards. *Id.* The Ninth Circuit reversed the district court's grant of summary judgment to the government on the grounds that Hall had averred his existing respiratory issues would be aggravated by emissions from the development and held that "evidence of a credible threat to plaintiff's physical well-being from airborne pollutants falls well within the range of injuries to cognizable interests that may confer standing." Id. at 976. As Plaintiffs point out, the Ninth Circuit concluded that "Hall need not establish causation with the degree of certainty that would be required of him to succeed on the merits, say, of a tort claim." Pls. Opp. 19 [Doc. No. 105] (quoting *Hall*, 266 F.3d at 977).

But while Plaintiffs may only need to establish the "reasonable probability' of the challenged action's threat to his concrete interest," id. (citing Hall, 266 F.3d at 977), such evidence is absent here. Plaintiffs contend that the Project will emit air pollutants, which are harmful to human health. Pls. Opp. 21 [Doc. No. 105]. Oliver states generalized concerns for her respiratory health, and the health of the entire region, from the Project's potential air quality impacts. Oliver Suppl. Decl. ¶ 12 [Doc. No. 108]. She likewise states a generalized concern about the Project's potential to increase greenhouse gas emissions and contribute to the effects of climate change. *Id.* at \P 13. However, Oliver does not point to any evidence to suggest the risk to her will increase, even marginally. Generalized concerns regarding harm to the environment alone are insufficient to confer standing. See Summers v. Earth Island Institute, 555 U.S. 488, 494, 129 S. Ct. 1142, 173 L. Ed. 2d 1 (2009); see also Ctr. for Biological Diversity v. *United States DOI*, 563 F.3d 466, 478, 385 U.S. App. D.C. 257 (D.C. Cir. 2009) ("climate change is a harm that is shared by humanity at large"). As Vineyard Wind points out, the Record reflects that the air quality impacts for the Project are "negligible to minor and minor beneficial" and that emissions will not impact Nantucket onshore. Joint SOF ¶¶ 162-166 [Doc. No. 118]. As a result, Oliver cannot establish standing as to the NEPA air quality and greenhouse gas claims. Absent standing for any one member, ACK RATs cannot establish associational standing. See AVX Corp., 962 F.2d at 116.

Thus, the court does not have jurisdiction to consider Plaintiffs' NEPA air quality and emission claims.⁹

VI. Discussion

A. Applicable Law

1. Administrative Procedure Act

A summary judgment motion has a "special twist in the administrative law context." Boston Redevelopment Auth. v. Nat. Park Serv., 838 F.3d 42, 47 (1st Cir. 2016) (quotations omitted). In an APA action, a motion for summary judgment serves as "a vehicle to tee up a case for judicial review and, thus, an inquiring court must review an agency action not to determine whether a dispute of fact remains but, rather, to determine whether the agency action was arbitrary and capricious." Id. (citing cases); see also 5 U.S.C. § 706(2)(A) ("The reviewing court shall . . . hold unlawful and set aside agency action . . . found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law[.]").

Because the APA affords great deference to agency decision-making and agency actions are presumed valid, "judicial review [under the APA], even at the summary judgment stage, is narrow." Associated Fisheries v.

^{9.} Because Plaintiffs do not have standing to bring these claims, the court does not address Vineyard Wind's argument that Plaintiffs' air quality-related NEPA claims are barred by the doctrine of administrative waiver. *See* Vineyard Wind Opening Mem. 22-23 [Doc. No. 100].

Daley, 127 F.3d 104, 109 (1st Cir. 1997) (citing Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 415-16, 91 S. Ct. 814, 28 L. Ed. 2d 136 (1971)). Courts should "uphold an agency determination if it is 'supported by any rational view of the record." Marasco & Nesselbush, LLP v. Collins, 6 F.4th 150, 172 (1st Cir. 2021) (quoting Atieh v. *Riordan*, 797 F.3d 135, 138 (1st Cir. 2015)). Even where an inquiring court disagrees with the agency's conclusions, the court cannot "substitute its judgment for that of the agency." Boston Redevelopment Auth., 838 F.3d at 47 (quoting Assoc'd Fisheries, 127 F.3d at 109). Rather, an agency's action should only be vacated where it "has relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Nat'l Ass'n of Home Builders v. Defs. of Wildlife, 551 U.S. 644, 658, 127 S. Ct. 2518, 168 L. Ed. 2d 467 (2007) (quotations omitted).

2. Endangered Species Act

Section 7(a)(2) of the Endangered Species Act commands that "[e]ach Federal agency shall . . . insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species[.]" 16 U.S.C. § 1536(a)(2). "This substantive requirement is backed up by a scheme of procedural requirements that set up a consultation process between

the agency . . . and [NMFS] . . . to determine whether endangered species or critical habitat are jeopardized by proposed agency action and whether this adverse impact may be avoided or minimized." *Water Keeper Alliance v. United States DOD*, 271 F.3d 21, 25 (1st Cir. 2017); *see also* 16 U.S.C. § 1536; 50 C.F.R. § 402.14. NMFS is required to utilize the "best scientific and commercial data available" in rendering its biological opinion. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d).

Section 9 of the ESA prohibits the "take" of any endangered or threatened species. 16 U.S.C. § 1538(a). Under the ESA, the term "take" means to harass, hunt, shoot, capture, trap, kill, collect, wound, harm, or pursue, or attempt any such activities. 16 U.S.C. § 1532(19). Despite this prohibition, taking may be permitted where it is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." 16 U.S.C. § 1539(a) (1)(B). Incidental take can be exempted from liability as part of the consultation process. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(g)(7), (i). Where NMFS' biological opinion concludes that it will result in "incidental take" of ESA listed species, and that such take will not violate ESA Section 7(a)(2), the biological opinion must include a written statement that (i) specifies the impact of such incidental take on the species; (ii) specifies the reasonable and prudent measures necessary or appropriate to minimize the impact of said take; (iii) specifies those measures necessary to comply with the MMPA and applicable regulations; and (iv) sets forth terms and

conditions that must be complied with by the agency and/or applicant to implement (ii) and (iii). 16 U.S.C. § 1536(b)(4).

3. National Environmental Policy Act

NEPA obligates federal agencies to "consider every significant aspect of the environmental impact of a proposed action . . . [and] ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process." United States v. Coalition for Buzzards Bay, 644 F.3d 26, 31 (1st Cir. 2011) (quotations omitted). NEPA requires that any agency considering action that would have a significant impact on the environment prepare an EIS, that contains a "detailed statement" regarding the environmental impacts of the proposed action and all reasonable alternatives. Dubois v. Dep't of Agriculture, 102 F.3d 1273, 1285 (1st Cir. 1996); 42 U.S.C. § 4332. NEPA "does not mandate particular results, but simply prescribes the necessary process." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350, 109 S. Ct. 1835, 104 L. Ed. 2d 351 (1989); see also Winter v. NRDC, Inc., 555 U.S. 7, 129 S. Ct. 365, 172 L. Ed. 2d 249 (2008). "So long as the environmental effects of a proposed action have been adequately identified and studied, the agency is free to weigh those effects and decide—within the limits fixed by the APA—that other values overbalance environmental costs." Coalition for Buzzards Bay, 644 F.3d at 31 (citing Robertson, 490 U.S. at 350).

B. Notice/Waiver¹⁰

Defendants and Vineyard Wind contend Plaintiffs failed to provide Defendants with adequate notice as to their objections to BOEM and NMFS: (i) approving soft-start pile driving procedures that would cause right whales to flee the Project Area into vessel traffic (Pls. Mem. 22-23 [Doc. No. 89]); (ii) failing to consider the potential biological removal threshold ("PBR") for right whales in the 2021 BiOp (Pls. Mem. 22-23 [Doc. No. 89]); (iii) approving override procedures that would permit the Vineyard Wind lead engineer to override shutdown directives and continue pile driving if necessary for safety or for the integrity of the pile driving installation; (Pls. Mem. 30-31 [Doc. No. 89]); (iv) approving pile driving "clearance zones" that do not cover the entirety of the potential Level A harassment noise impact area (Pls. Opp. 25-26 [Doc. No. 105]); and (v) approving a passive acoustic monitoring detection limit that does not cover the entirety of the potential Level A harassment noise impact area (Pls. Mem 32 [Doc. No. 89]; Pls. Opp. 25-26

^{10.} Defendants and Vineyard Wind contend, and Plaintiffs do not dispute, that certain allegations in Plaintiffs' Amended Complaint are waived for failure to raise them in summary judgment briefing. See Fed. Defs. Opening Mem. 50, n.37 [Doc. No. 96]; Vineyard Wind Opening Mem. 24 [100]. Specifically, Plaintiffs do not discuss any ESA-listed species other than the right whale (Am. Compl. ¶¶ 72, 76 [Doc. No. 59]), nor do they raise arguments concerning the Incidental Take Statement (id. ¶ 73), or the Joint ROD (id. ¶ 69). These claims have been waived, and summary judgment is granted to Defendants and Vineyard Wind as to these issues.

[Doc. No. 105]). See Fed. Defs. Opening Mem. 9-10 [Doc. No. 96]; Vineyard Wind Opening Mem. 7 [Doc. No. 100].

Under Section 11(g)(2)(A)(i) of the ESA, citizens seeking to sue the government for violations of the ESA are first are required to submit a written notice of the alleged violation(s), and then must wait at least sixty days from submitting the notice before filing commencing a civil suit. 16 U.S.C. § 1540(g)(2)(A)(i). The notice must "at a minimum, provide sufficient information of a violation so that the Secretary or agency can identify and attempt to abate the violation." *Ctr. for Bio. Div. v. Haaland*, 2023 U.S. Dist. LEXIS 38958, 2023 WL 2401662, at *6-*7 (D.C. Cir. Mar. 8, 2023) (quotations and brackets omitted). The court addresses the sufficiency of Plaintiffs' notice as to each of these issues in turn.¹¹

i. Soft Start Pile Driving Procedures

Plaintiffs' 60-Day Letter states:

The BiOp fails to assess vessel strike risk to right whales and other federally-listed species in the context of the already-crowded shipping lanes in or near the Project Area. In addition,

^{11.} Plaintiffs asserted in briefing that they do not need to satisfy the 60-Day notice requirement for their 2021 BiOp claims (against NMFS), because the claims arise under the APA, not the ESA. Pls. Opp. 22 [Doc. No. 105] (citing *Strahan v. Linnon*, 967 F. Supp. 581, 592 (D. Mass. 1997)). At the summary judgment hearing, however, Plaintiffs' counsel waived that argument. Jan. 24, 2023 Tr. 23:15-24:8, 32:16-33:10.

the BiOp assumes that right whales and other federally-listed species will move out of the Project Area as an "avoidance response" to pile driving noise; however, if this is true, these animals, in their efforts to swim away from the pile driving noise, will likely enter areas of high vessel traffic, increasing the risk of ship strikes. This impact is not analyzed in the BiOp.

60-Day Intent to Sue Letter, Comment 36 [Doc. No. 96-3]. While the Letter does not mention the use of soft-start procedures in particular, Plaintiffs' articulated concern—that pile driving noise will provoke an avoidance response and cause right whales to enter high-traffic areas, thus increasing the risk of vessel strikes—applies to both soft-start and other pile driving activity. The 60-Day Letter adequately apprised Defendants of that concern.

ii. PBR

PBR is a metric from the MMPA for the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. 16 U.S.C. § 1362(20). As the parties concede, neither the 2021 BiOp nor Plaintiffs' 60-Day Letters uses the term "PBR." See Jan. 24, 2023 Tr. 27:12-15. However, the 60-Day Letter states:

The BiOp's no jeopardy determination fails to account for recent sharp declines in right whale populations. It also fails to account for

the extremely low abundance number for the species, which is now less than 350 individuals. Given the low number of right whales and the consistent loss of calf-bearing females, the BiOp should analyze and explain how project-related take of any individual could be absorbed without jeopardizing the species as a whole. BiOp, however, provides no such analysis or explanation and is therefore deficient as a matter of law.

60-Day Letter, Comment 28 [Doc. No. 96-3]; Pls. Opp. 24 [Doc. No. 105].

To the extent Plaintiffs claim that the 2021 BiOp needed to discuss the threat the Project poses to the declining right whale populations, Plaintiffs have provided adequate notice. To the extent Plaintiffs claim that the 2021 BiOp needed to expressly address the specific PBR, that claim is waived.

iii. Override Procedures

Plaintiffs' 60-Day Letter provides two comments regarding the "feasibility" and "practicability" exceptions to the pile driving limitations imposed by BOEM and NMFS. Plaintiffs claim that under these exceptions:

Vineyard Wind can continue pile driving even in the presence of right whales or other listed species if halting the pile driving work is not feasible [or practicable]. Th[ese] exception[s]

makes the pile driving protections and limitations meaningless, as it gives Vineyard Wind complete discretion as to when and under what circumstances they can be disregarded.

See 60-Day Letter, Comments 13, 14 [Doc. No. 96-3]; Pls. Opp. 24-25 [Doc. No. 105]. In both instances, these comments adequately apprised Defendants of Plaintiffs' concern that Vineyard Wind's ability to override certain protections by way of their discretion makes these limitations meaningless. Accordingly, Plaintiffs provided adequate notice as to their claims regarding the override procedures.

iv. Clearance Zones & PAM Detection Limits

Plaintiffs point to a single comment in their 60-Day Letter as putting Defendants on notice as to concerns regarding the size and sufficiency of the pile driving clearance zones and the limitations of PAM. Specifically, the 60-Day Letter states:

The BiOp improperly accepts Vineyard Wind's position that the project will result in no Level A harassment of right whales. That position is based on the unproven and unsubstantiated efficiency of Vineyard Wind's proposed "detect & avoid" measures—the very same measures that include a host of exceptions, qualifications, and loopholes.

60-Day Letter, Comment 38 [Doc. No. 96-3]; Pls. Opp. 25-26 [Doc. No. 105]. While it may not be necessary for Plaintiffs to mention PAM or clearance zones specifically, Comment 38 is far too generalized to put Defendants on notice as to concerns about whether the size of the area from which right whales should be excluded is sufficient such that Defendants can identify and attempt to abate the concerns. *See Ctr. for Bio. Div.*, 2023 U.S. Dist. LEXIS 38958, 2023 WL 2401662 at *6-*7. Accordingly, Plaintiffs have waived claims regarding the sufficiency and size of the clearance zones and the limitations on PAM detection for failure to provide notice to Defendants.

C. Merits of the Noticed Claims

The court now turns to the merits of the claims for which Plaintiffs provided proper notice, specifically: (i) whether in issuing the 2021 BiOp, NMFS acted arbitrarily, capriciously, and unlawfully by failing to adequately consider the Project's impact on North Atlantic right whales and instead concluding the Project would not jeopardize the species in violation of ESA Section (7)(a) (2); (ii) whether NMFS and BOEM violated and continue to violate Section 7(a)(2) of the ESA by failing to ensure through consultation that BOEM's approval of impacts of the Project will not jeopardize the right whale; and (iii) whether BOEM violated NEPA by failing to take the requisite "hard look" at the environmental consequences to the right whales, instead issuing a Final EIS that reflected many of the same claimed procedural and substantive defects as the 2021 BiOp. Because Plaintiffs' sole surviving claim under NEPA is that the Final EIS

"parrots the flawed analysis and conclusions set forth in the BiOp," the court considers Plaintiffs' ESA and NEPA claims together.

1. 2021 BiOp: Best Scientific and Commercial Data Available

Plaintiffs argue that the 2021 BiOp is flawed because it fails to engage with the "best scientific and commercial data available," as required under the ESA, and that, as a result NMFS and BOEM have violated the ESA by promulgating and relying on the 2021 BiOp. Pls. Mem. 14 [Doc. No. 89] (citing 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8)). Plaintiffs point to five studies¹² which they contend the 2021 BiOp either does not adequately engage with or does not address at all:

1. Quintana-Rizzo, et al., "Residency, demographics, and movement patterns of North Atlantic right whales Eubalaena glacialis in an offshore wind energy development area in southern New England, USA" Endangered Species Research,

^{12.} In connection with their *Opposition* [Doc. No. 105], Plaintiffs offer a sixth study, Barkaszi, M. et al., *PAMGuard Quality Assurance Module for Marine Mammal Detection Using Passive Acoustic Monitoring* (August 2020). See Decl. of David Hubbard [Doc. No. 109]. The court construes this submission as a motion to supplement the record, which is denied as untimely. See Scheduling Order [Doc. No. 58] ("Any motions related to disputes about the administrative record... must be filed no more than 30 days after service of the administrative record."). The court does not reach Defendants' substantive critiques of Barkaszi where it is not part of the Record.

Vol. 45: 251-268 (2021) ("Quintana-Rizzo"). NMFS 53318-35; Joint Appendix, JA012307-325 [Doc No. 117-27].

- 2. A. Key Outcomes Memorandum dated October 4, 2019 regarding an April 23-26, 2019 Atlantic Large Whale Take Reduction Team Meeting convened by NMFS ("2019 Key Outcomes Memorandum"). BOEM_0194534-48; Joint Appendix, JA008867-881 [Doc. No. 117-24].
- 3. The North Atlantic Right Whale Consortium 2020 Annual Report Card. ("2020 Report Card"). BOEM_0208677-98, Joint Appendix, JA009302-23 [Doc. No. 117-25].
- 4. NOAA Technical Memorandum NMFS-NE-271, The US Atlantic and Gulf of Mexico Marine Mammal Stock Assessments 2020 ("2020 Stock Assessment").¹³
- 5. Stober, U, Thomsen F. 2021. How could operational underwater sound from future offshore wind turbines impact marine life? J. Acoust. Soc. Am. 2021 Mar; 149(3) ("Stober"). NMFS 57131-36; Joint Appendix, JA012446-51 [Doc. No. 117-27].

^{13.} Although referenced in the 2021 BiOp, the court was unable to locate this document in the AR or the Joint Appendix. The document is available at https://media.fisheries.noaa.gov/2021-07/Atlantic%202020%20SARs%20Final.pdf?null%09, last accessed May 12, 2023.

Pls. Mem. 17-24 [Doc. No. 89]. Plaintiffs argue that, in failing to rely on these studies as the "best scientific and commercial data available", the 2021 BiOp's conclusions are flawed, and that, in issuing and relying on a legally deficient BiOp, NMFS and BOEM acted arbitrary and capriciously in violation of the ESA. See Pls. Mem. 5-6, 17-24 [Doc. No. 89]. Defendants contend that the 2021 BiOp considered the best available scientific and commercial information available, and that, in each instance, NMFS either did consider the offered materials or was not required to do so. Fed. Defs. Opening Mem. 12-22 [Doc. No. 96]; see also Vineyard Wind Opening Mem. 9-10 [Doc. No. 100].

As part of the consultation process under the ESA, "each agency shall use the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2). The ESA's regulations direct:

In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions as proposed or taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation. Measures included in the proposed action or a reasonable and prudent alternative that are intended to avoid, minimize, or offset the effects of an action are considered like other portions of the action and do not require any additional demonstration of binding plans.

50 C.F.R. \S 402.14(g)(8)). Neither the ESA nor its implementing regulations provide direction as to what constitutes the "best scientific and commercial data available." Rather, determining which studies and data are the "best available" is "itself a scientific determination deserving deference." See Miccosukee Tribe of Indians of Florida v. United States, 566 F.3d 1257, 1265 (11th Cir. 2009) (citing Marsh v. Or. Natural Res. Council, 490 U.S. 360, 377-78, 109 S. Ct. 1851, 104 L. Ed. 2d 377 (1989)); see also Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, 462 U.S. 87, 103, 103 S. Ct. 2246, 76 L. Ed. 2d 437 (1983) (a reviewing court should "generally be at its most deferential" where an agency "is making predictions, within its area of special expertise, at the frontiers of science[.]"). "The obvious purpose of the requirement... is to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise." Bennett v. Spear, 520 U.S. 154, 176, 117 S. Ct. 1154, 137 L. Ed. 2d 281 (1997).

In light of the Record before the court and the deference accorded to NMFS in determining what constitutes the "best scientific and commercial data available," the court finds Plaintiffs' arguments unpersuasive. First, NMFS did "use" certain of these studies in the 2021 BiOp. As to Quintana-Rizzo, Plaintiffs are incorrect that the 2021 BiOp does not "engage" with the study. Plaintiffs acknowledge as much in the Joint Statement of Undisputed Facts. Joint SOF ¶ 118 [Doc. No. 118] ("The BiOp cites to and recognized the findings of Quintana-Rizzo et al. (2021), which indicated, among other things, that the North Atlantic right whale presence within the Project Area remains seasonal[.]"). NMFS considered

whether Quintana-Rizzo would change the conclusions it reached in the 2020 BiOp, and it did not. Fed. Defs. Reply. 13 n.12 [Doc. No. 114]. Similarly, the 2020 Annual Report Card was considered in the 2021 BiOp. See 2021 BiOp, BOEM_0077276 at -7330-31 (discussing calving rates for right whales from 2006 to 2017 and 2019-2020). Plaintiffs disagree with NMFS's conclusions after review of the data, but the court may not second-guess NMFS's considered determinations. Boston Redevelopment Auth., 838 F.3d at 47; see also Blue Water Fishermen's Ass'n v. Nat. Marine Fish. Serv., 226 F. Supp. 2d 330, 338 (D. Mass. 2002) ("This [c]ourt therefore may not champion a competing interpretation of the data over an agency's conclusion that finds support in the record.").

Second, NMFS considered certain of these studies and effectively concluded that they were not the "best available." For instance, as Vineyard Wind points out, the 2021 BiOp reflects that NMFS examined Stober's conclusions regarding underwater operational noise levels, and after evaluating it, NMFS concluded that the study was less reliable and that an alternative study was superior. See Vineyard Wind Opening Mem. 9-10 [Doc. No. 100]; 2021 BiOp, BOEM_0077276 at -7432 ("Without information on soundscape, water depth, sediment type, wind speed, and other factors, it is not possible to determine the reliability of any predictions from the Stober and Thomsen paper to the Vineyard Wind project."). "Thus, in reviewing and rejecting [a contrary] position, NMFS did not ignore the best available data. Rather it considered and disagreed with [the contrary] interpretation of the data." Blue Water Fishermen's Ass'n, 226 F. Supp. 2d

at 339. Plaintiffs contend that the 2021 BiOp's rejection of Stober is unsupported, but Plaintiffs' bare contention cannot overcome the deference accorded to NMFS in making such determinations. Finally, Plaintiffs' passing argument that, in discounting Stober, NMFS failed to "give the benefit of the doubt to the species," *Pls. Opp.* 39 [Doc. No. 105] (quoting *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988)), is inapplicable. Unlike in *Conner*, NMFS did not ignore the available data.

Plaintiffs are likewise incorrect that the 2020 BiOp did not consider the 2020 Stock Assessment. Plaintiffs contend that NMFS's omission of this study is critical because of the study's discussion of the right whale PBR, *Pls. Mem.* 22-23 [Doc. No. 89], but as discussed *supra*, Plaintiffs have waived any argument concerning discussion of the PBR specifically. The court agrees with Defendants that the Record reflects NMFS did consider the right whale's survival rate, even if it did not discuss PBR specifically. See Fed. Defs. Opening Mem. 18 [Doc. No. 96]. The 2021 BiOp states:

[d]ue to the declining status of North Atlantic right whales, the resilience of this population to stressors that would impact the distribution, abundance, and reproductive potential of the population is low. The species faces a high risk of extinction . . . ongoing effects in the action area (e.g. global climate change, decreased prey abundance, vessel strikes, and entanglements in U.S. state and federal fisheries) have contributed to concern for the species' persistence.

2021 BiOp, BOEM_0077276 at -7627.¹⁴ Second, although the 2021 BiOp does not rely on the 2020 Stock Assessment, the court defers to NMFS's conclusion that, because the information contained in the Stock Assessment was from 2018, it was appropriate for NMFS to rely on more recent scientific studies in order to comply with its requirement to use the "best scientific" information available. *See* Fed. Defs. Opening Mem. 17-18, n.18 [Doc. No. 96]; Fed. Defs. Reply 17-18 [Doc. No. 114] (citing 2021 BiOp, NMFS 17234).

Plaintiffs' argument that NMFS's failure to discuss the TRT Key Outcomes Memorandum in the 2021 BiOp amounts to a failure to consider the risks of entanglement, *Pls. Opp.* 21-22 [Doc. No. 105], is also unavailing. To the contrary, the 2021 BiOp contains extensive discussion of the entanglement risk and reflects that NMFS "reviewed the most recent data available on reported entanglements for the ESA listed whale stocks that occur in the action area." 2021 BiOp, BOEM_0077276 at -7411 (citing, as to right whales, the 2020 and 2021 Stock Assessments). Further, to the extent NMFS determined that it need not consider the TRT Key Outcomes Memorandum, that determination is entitled to deference, particularly where the Memorandum was the outcome of a meeting

^{14.} Plaintiffs' argument additionally fails where, as the Defendants contend, NMFS and BOEM was not required to have addressed PBR in the context of the 2021 BiOp, because PBR is a concept from the Marine Mammal Protection Act ("MMPA"), not the ESA or NEPA, and NMFS/GAR considered PBR in the context of its issuance of the Incidental Harassment Authorization under the MMPA. See Fed. Defs. Opening Mem. 17 and n.17 [Doc. No. 96].

NMFS intends to use . . . to guide rulemaking starting in May 2019," TRT Key Outcomes Memorandum, BOEM_0194534, reflecting that NMFS was engaged in discussions, strategy, and rulemaking that considered the risk of entanglement well before it issued the 2020 or 2021 BiOp. See also Fed. Defs. Opening Mem. 16 [Doc No. 96] (citing Dist. 4 Lodge of the Int'l Ass'n of Machinists and Aerospace Workers Local Lodge 2017 v. Raimondo, 40 F.4th 36, 41 (1st Cir. 2022) (considering challenge to NMFS's regulations prohibiting vertical buoy lines in certain areas to protect right whales)). The concern that NMFS is operating "on the basis of speculation or surmise" is not present here.

Accordingly, Plaintiffs have not shown that NMFS and BOEM violated the ESA by failing to rely on the "best scientific and commercial data available" during the consultation process.

2. 2021 BiOp & Final EIS: Assessment of the Risk of Project-Related Vessel Strikes

Plaintiffs contend that both the 2021 BiOp and Final EIS fail to adequately consider the risk of Project-related vessel strikes of right whales. First, Plaintiffs contend that neither document contains "key" information concerning vessel traffic, specifically, how many Project-related vessels may travel at speeds exceeding the 10 knots per hour limit intended to prevent lethal strikes and the total miles that Project-related vessels may travel. Pls. Mem. 35, 47 [Doc. No. 89]. Second, Plaintiffs contend that

neither document considers that pile driving procedures, soft-start and otherwise, will prompt right whales to flee into areas of heavy vessel traffic, increasing their risk of injury or death. Id. at 36, 46. Finally, Plaintiffs contend that the risk of vessel strikes is not adequately assessed where the 2021 BiOp relies on mitigation procedures that are "unproven" and "facially ineffective," such as the use of speed restrictions, PSOs and PAM. Id. at 36-38 (citing Nat'l Wildlife Fedn v. Nat'l Marine Fisheries Serv., 184 F. Supp. 3d 861, 873 (D. Or. 2016)). Defendants respond that the 2021 BiOp, Final EIS, and IHA each contain detail concerning vessel traffic and Plaintiffs have not provided a basis for why the total miles Project vessels must travel is required over the data Defendants do provide, that the 2021 BiOp reasonably concluded that the Project is not likely to result in death or injury to right whales, including in response to soft-start procedures, and that the mitigation measures are designed to be considered as a complete set, not in isolation as Plaintiffs propose. Fed. Defs. Opening Mem. 31-33 [Doc. No. 96].

Plaintiffs have not offered any authority that Defendants' failure to consider or include one metric over another is either arbitrary or capricious or in violation of NEPA. Nor have they offered any evidence to support their speculative argument that right whales will flee *into* vessel traffic. ¹⁵ And where NMFS has considered the issue

^{15.} In their arguments concerning the risk of vessel-strikes and entanglement, Plaintiffs assert that "NMFS Statistical Area 537," the large geographic area within which the WDA is located, is particularly high risk for right whales. Pls. Opening Mem. 21-22, 33 [Doc. No. 89]; Pls. Opp. 32-33 [Doc. No. 105]. Defendants and

of vessel strikes and relied on available data, it is entitled to deference, even if that data is not conclusive. See Pac. Shores Subdiv. Cal. Water Dist. v. U.S. Army Corps of Eng'rs, 538 F. Supp. 2d 242, 250 (D.D.C. 2008).

As to Plaintiffs' attacks on the mitigation measures, the court reviews the suite of measures adopted by Defendants as a result of the 2021 BiOp process and not the measures in isolation where NMFS and BOEM based their conclusions concerning the risk of vessel strikes on the suite of measures as a whole. Specifically, the 2021 BiOp stated "measures that will be required of all project vessel operations will ensure that the opportunity for detection of any ESA-listed whale that could co-occur with a vessel's transit route will be maximized . . . Combined with the requirements for vessel speed restrictions, [NMFS] expect[s] that these measures will make it extremely unlikely that a project vessel will collide with a whale." 2021 BiOp, BOEM 0077276 at -7527. Where the Record demonstrates that NMFS carefully considered this suite of factors, along with other preexisting rules, and came to a well-supported conclusion, the court concludes Plaintiffs' challenges as to some measures is insufficient to deem the 2021 BiOp invalid. See Nat'l Ass'n of Home Builders v.

Vineyard Wind contest Plaintiffs' theory and dispute several of Plaintiffs' factual assertions as unsupported by the Record. Fed. Defs. Opening Mem. 15 [Doc. No. 96]; Vineyard Wind Reply 8-9 [Doc. No. 115]. Where the court concludes that both NMFS and BOEM's consideration of the risks to right whales and decision to implement mitigation measures are entitled to deference, the court need not wade into the parties' dispute regarding the character of Area 537.

Defs. of Wildlife, 551 U.S. 644, 658, 127 S. Ct. 2518, 168 L. Ed. 2d 467 (2007).

Similarly, Plaintiffs have not demonstrated that BOEM, in preparing the Final EIS, violated NEPA by failing to adequately consider the risk of vessel strikes. Rather, the environmental effects "were adequately identified and studied" and the agency acted "within the limits fixed by the APA." *Coalition for Buzzards Bay*, 644 F.3d at 31. Accordingly, Plaintiffs' claims concerning Defendants' assessment of the risk of vessel strikes fails.

3. 2021 BiOp & Final EIS: Pile Driving Noise

Plaintiffs contend that neither the 2021 BiOp nor the Final EIS appropriately consider the level of harassment to which right whales will be exposed from pile driving during the construction of the Vineyard Wind Project. Pls. Mem. 29-35, 49 [Doc. No. 89]. In support of this

^{16.} Plaintiffs' contention that the soft-start pile driving procedure is a prohibited, intentional take is without merit. Pls. Mem. 30 [Doc. No. 89]; Pls. Opp. 43-44 [Doc. No. 105]. NMFS regulations instruct that "[i]ncidental harassment, incidental taking and incidental, but not intentional, taking all mean an accidental taking. This does not mean that the taking is unexpected, but rather it includes those takings that are infrequent, unavoidable or accidental." 50 C.F.R. § 216.103. Here, the 2021 BiOp reflects that any such take is expected to be infrequent and accidental. First, pile driving will only occur in conjunction with other mitigation measures designed to minimize the risk that right whales may be in the area. See supra, [Fact section]; see, e.g., 2021 BiOp, BOEM_0077276 at -7461 ("the proposed requirement that pile driving can only commence when

claim, Plaintiffs reiterate that three mitigation measures: PSOs, PAM, and soft-start procedures, are inadequate insofar as they will not ensure right whales are clear of pile driving noise that may amount to Level A harassment. *Id.* Defendants contend that Plaintiffs' concerns regarding pile driving noise were considered as part of public comment on the IHA process, and that Plaintiffs' critiques do not acknowledge the suite of mitigation measures to be implemented. Fed. Defs. Opening Mem. 27, 38 [Doc. No. 96]; Fed. Defs. Reply 28 [Doc. No. 114].

As to soft-start procedures, the 2021 BiOp expressly acknowledges that NMFS cannot predict the level or extent that this procedure may reduce right whale exposure to pile driving noise, and that, as a result "while the soft start is expected to reduce effects of pile driving we are not able to modify the estimated take numbers to account for any benefit provided by the soft start." 2021 BiOp, BOEM_0077276 at -7458. Plaintiffs' contention that NMFS's assessment of pile driving noise was inadequate because its reliance on soft-start procedures fails where NMFS disclaimed any reliance on soft-start procedures in its conclusions about the anticipated level of take by

the full extent of all clearance zones are fully visible to PSOs will ensure a high marine mammal detection capability[.]"). Moreover, pile driving of any kind would not proceed in instances where a whale has been detected in the area. 2021 BiOp, BOEM_0077276 at -7547. Therefore, the 2021 BiOp reflects that the procedure would only ever be used where a right whale has been undetected by the myriad of other mitigation measures implemented by Vineyard Wind and thus would be "accidental." Incidental take is permitted under the MMPA. 16 U.S.C. § 1371(a)(5)(D)(i).

harassment of right whales. Nor can Plaintiffs contend that BOEM or the Final EIS improperly relied on the 2021 BiOp's conclusions regarding the use of soft-start procedures where the use of the procedure has no impact on the 2021 BiOp's take assessment.

As with vessel strikes, Plaintiffs reiterate that PSOs and PAM are inadequate to prevent harm to right whales from pile driving noise. However, where NMFS and BOEM considered a suite of mitigation measures, Plaintiffs cannot challenge such procedures in a vacuum. Plaintiffs have not shown that NMFS's consideration of the suite of mitigation measures, or NMFS and BOEM's reliance on them, was arbitrary or capricious. *See Nat'l Ass'n of Home Builders v. Defs. of Wildlife*, 551 U.S. 644, 658, 127 S. Ct. 2518, 168 L. Ed. 2d 467 (2007). Accordingly, Plaintiffs' challenges to the 2021 BiOp and the Final EIS regarding its consideration of pile driving noise fail.

4. 2021 BiOp and Final EIS: Assessment of Operational Noise

Plaintiffs contend that the 2021 BiOp and Final EIS do not adequately address the impacts of the operational noise of the Vineyard Wind Project on right whales, relying principally on Stober. Pls. Mem. 23-24, 38-39, 48-49 [Doc. No. 89]. Plaintiffs further argue that NMFS and BOEM do not know what the impact of the Project will be on right whales because a project of this size has never been completed or studied. Pls. Mem. 23 [Doc. No. 89]. In response, Defendants point to the 2021 BiOp and Final EIS as having adequately considered the risk of

operational noise in their respective analysis. Fed. Defs. Opening Mem. 21, 48 [Doc. No. 96]; see also 2021 BiOp, BOEM_0077276 at -7431; Final EIS Vol I, BOEM_0068434 at -8599.

As discussed *supra*, NMFS considered Stober, and declined to follow it, instead adopting a more recent study on operational noise. Fed. Defs. Opening Mem. 33 [Doc. No. 96]. While Plaintiffs read the available data differently than NMFS, where NMFS's assessment of operational noise is supported by a rational view of the record, Plaintiffs have not shown a violation of the ESA. See Marasco & Nesselbush, LLP, 6 F.4th at 172. Similarly, Plaintiffs' disagreement with NMFS's analysis does not demonstrate that BOEM failed to conduct the analysis required under NEPA. See Lovgren v. Locke, 701 F.3d 5, 38 (1st Cir. 2012) ("That [Plaintiffs] disagree[] with this conclusion is not a basis for deeming it invalid."). Accordingly, Plaintiffs have not shown that Defendants failed to adequately consider operational noise in connection with the Project.

5. 2021 BiOp and Final EIS: Increased Stress Due to Loss of Foraging Opportunities

Plaintiffs contend that the 2021 BiOp does not adequately assess the extent to which Vineyard Wind's pile driving activities will reduce right whales' foraging opportunities. Pls. Mem. 40 [Doc. No. 89]. Similarly, Plaintiffs contend that the EIS does not adequately assess the quality of the foraging habitat in the light of the Project. Pls. Mem. 39, 48 [Doc. No. 89]. In both instances,

Plaintiffs contend that "recent studies" show that the right whales' food source is changing, and will change further based on the Project, however, Plaintiffs' only support for this argument is Quintana-Rizzo. As discussed supra, NMFS considered and relied on Quintana-Rizzo in its analysis of behavioral impacts of the Project and pile driving to right whales. BOEM 0077461-62. Where Plaintiffs' argument as to both the 2021 BiOp and the Final EIS is premised on its disagreement about how the agencies have interpreted Quintana-Rizzo, that argument fails, both because of the deference accorded to the agency in determining how to use the best available data, supra, and because Plaintiffs' disagreement is not a basis to challenge the agency's actions as arbitrary and capricious or in violation of NEPA. See Marasco & Nesselbush, LLP, 6 F.4th at 172; see also Lovgren, 701 F.3d at 38.

6. 2021 BiOp and Final EIS: Entanglement in Fishing Gear

Plaintiffs contend that neither the 2021 BiOp nor the Final EIS adequately consider the risk of fishing gear entanglement posed by the Project, both directly, in the form of fisheries studies Vineyard Wind will be required to conduct, and indirectly, as soft-start procedures may drive right whales into areas of higher entanglement risk. Pls. Mem. 40-41, 47-48 [Doc. No. 89].

Plaintiffs' argument regarding the risk of entanglement stemming from soft-start procedures is speculative. As Defendants point out, the biological consultation process was reinitiated in May 2021 in part so that

NMFS could consider the effects of the proposed fishery monitoring surveys, and NMFS concluded that the risk of entanglement from the survey is so small "it cannot be meaningfully measured." Fed. Defs. Opening Mem. 12 [Doc. No. 96]; 2021 BiOp, BOEM BOEM 0077276 at -7581 (discussing the "Impacts to Habitat" of the proposed marine resource survey and monitoring activities). Defendants also contend that the Final EIS specifically addresses any concerns regarding the risks of fisheries surveys, including by requiring the use of "weak-link technology to minimize whale entanglement" and seasonally restricting survey activity when right whales may be present. Fed. Defs. Opening Mem. 46 [Doc. No. 96]; see also Final EIS Vol. II, BOEM 0068786 at -9201. As with the other concerns raised by Plaintiffs, the Record reflects that BOEM and NMFS did consider these issues, and that Plaintiffs' critiques amount to disagreements with the agencies' conclusions that cannot serve as a basis for determining the agency action is invalid.

7. 2021 BiOp and Final EIS: Cumulative Impacts

Plaintiffs claim that the 2021 BiOp did not consider all of the stressors of the construction and operation of the Project "synergistically," and that, as a result the 2021 BiOp's "no jeopardy" determination as to the right whales is flawed. Pls. Mem. 42 [Doc. No. 89].¹⁷ Similarly, they

^{17.} Plaintiffs also argue that the 2021 BiOp fails to adequately assess the right whales' abundance and recovery goals. Pls. Mem. 42 [Doc. No. 89]; Pls. Opp. 57, 63 [Doc. No. 105]. As to recovery, the court agrees with Defendants that the Record reflects NMFS

contend that the Final EIS did not look at the cumulative impacts of the Project on right whales, in conjunction with numerous other potential wind-farm projects, with the sufficiently "hard look" required under NEPA. *Id.* On both points, Plaintiffs rely on their arguments as to the flaws in NMFS's analysis concerning vessel strikes, pile driving and operational noise, fishing entanglement risk, and loss of foraging habitats. Because Plaintiffs do not offer any new arguments regarding the "synergistic" impacts, Plaintiffs' challenges to the 2021 BiOp and Final EIS's consideration of cumulative impacts fail for the reasons previously discussed.

8. 2021 BiOp and Final EIS: Inadequate Description of Baseline Conditions

Plaintiffs allege that, under the ESA and implementing regulations, the 2021 BiOp does not meet the minimum standards for describing baseline conditions because it fails to consider the currently degraded status of the right whale, underemphasizes the significance of the larger Rhode Island/Massachusetts Wind Energy Area as a habitat for foraging and otherwise, and fails to include the speed and size breakdown of vessels in

considered the right whales' recovery goals in the context of the proposed action and that consideration is entitled to deference. *See* Fed. Defs. Reply. 43 [Doc. No. 114] (citing 2021 BiOp, NMFS 17528-32). As to abundance, the court likewise agrees that analysis is not necessary where Defendants do not anticipate the Project will affect species abundance because the take authorized is neither lethal nor anticipated to reduce right whale reproduction. *See* Fed. Defs. Reply. 42-43 [Doc. No. 114].

the immediate area. Pls. Mem. 25-27 [Doc. No. 89]. Plaintiffs rely on their interpretation of Quintana-Rizzo in support. Defendants contend that NMFS did consider the appropriate environmental baseline where it relied on the best data available concerning the status of the right whale and included an analysis of the vessel traffic. Defendants further contend that Plaintiffs' challenges to the baseline conditions lack merit where they do not point to superior evidence that NMFS failed to consider. Fed. Defs. Opening Mem. 23 [Doc. No. 96] (citing Bays' Legal Fund v. Browner, 828 F. Supp. 102, 106 n.7 (D. Mass. 1993)). NMFS's consideration of the environmental baseline must include:

the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation process.

50 C.F.R. § 402.02.

Where Plaintiffs rely on the Quintana-Rizzo study that the court has already concluded Defendants considered in preparing the 2021 BiOp, Plaintiffs' challenge lacks merit. Plaintiffs have not raised any issues regarding the environmental baseline that Defendants "entirely failed to consider."

Plaintiffs contend that both the 2021 BiOp and the Final EIS contain an inadequate description of the baseline conditions because they omit the current PBR threshold for right whales. As discussed *supra*, because Plaintiffs have waived claims concerning specific discussion of PBR, Plaintiffs have waived this claim. To the extent Plaintiffs challenge the 2021 BiOp and Final EIS as deficient because they fail to discuss the survival rate of the right whale, as discussed *supra*, Plaintiffs are incorrect. *see* 2021 BiOp, 2021 BiOp, BOEM_0077276 at -7628; *see also* Final EIS Vol I, BOEM_0068434 at -8573 (discussing, in the context of baseline conditions for a no-action alternative to the Project, the baseline conditions for right whales of reduced calving and increased entanglement as a "combination of factors [that] threatens the very survival of the species.").

Defendants contend that, as to the Final EIS, NEPA does not require an assessment of the environmental baseline, but, in any event, the Final EIS does describe the baseline conditions for right whales. Fed. Defs. Opening Mem. 42-43 [Doc. No. 96]. Defendants point to discussion in the Final EIS concerning the "No Action Alternative and Affected Environment," wherein BOEM addresses (i) seasonal foraging trends of right whales in the Action Area and New England waters, (ii) recent changes to right whale distribution and patterns, (iii) the risk posed to whales, especially right whales, by commercial fishing activities, (iv) increased mortality events from fishingrelated entanglements and vessel strikes, and (v) reduced calving rates. Final EIS VOL I, BOEM 0068434 at -8571-8576; see also Fed. Defs. Opening Mem. 42-43 [Doc. No. 96]. Plaintiffs do not point to any statutory or regulatory

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requirement that Defendants consider the environmental baseline under NEPA,¹⁸ and, in any event, Defendants discuss the environmental baseline for right whales in the Final EIS. BOEM's determination of what details are relevant to the environmental baseline contained in the Final EIS is entitled to deference.

Because Plaintiffs have not shown that either the 2021 BiOp or Final EIS contains an inadequate description of baseline conditions in violation of the ESA or NEPA, this challenge also fails.

VII. Conclusion

For the foregoing reasons, Plaintiffs have failed to demonstrate that NMFS or BOEM violated the Endangered Species Act or the National Environmental Policy Act in considering and issuing the 2021 Biological Opinion or the Final Environmental Impact Statement for the Vineyard Wind Project. Accordingly, Defendants and Vineyard Wind's Motions for Summary Judgment are

^{18.} Neither of Plaintiffs' cited cases stand for the proposition that NEPA requires an EIS set forth an environmental baseline. See Pls. Mem. 46 [Doc. No. 89]. Rather, American Rivers v. Fed. Energy Reg. Comm'n, 201 F.3d 1186 (9th Cir. 1999), addresses whether an environmental baseline is required in an EIS under the Federal Power Act and Half Moon Bay Fisherman's Mktg Ass'n v. Carlucci, 857 F.2d 505 (9th Cir. 1988), is appropriately limited to the nature of the proposed action at issue. There, the court held that the agency must establish an environmental baseline for an ocean area under NEPA before considering how dumping a large volume of dredged materials would impact the area.

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 $\operatorname{GRANTED}$ and Plaintiffs' Motion for Summary Judgment is DENIED.

IT IS SO ORDERED

May 17, 2023

/s/ Indira Talwani United States District Judge

APPENDIX C — RELEVANT STATUTORY PROVISIONS

16 U.S.C.A. § 1533

§ 1533. Determination of endangered species and threatened species

Effective: December 27, 2022

(a) Generally

- (1) The Secretary shall by regulation promulgated in accordance with subsection (b) determine whether any species is an endangered species or a threatened species because of any of the following factors:
 - (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
 - (B) overutilization for commercial, recreational, scientific, or educational purposes;
 - (C) disease or predation;
 - (D) the inadequacy of existing regulatory mechanisms; or
 - (E) other natural or manmade factors affecting its continued existence.
- (2) With respect to any species over which program responsibilities have been vested in the Secretary of

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Commerce pursuant to Reorganization Plan Numbered 4 of 1970--

- (A) in any case in which the Secretary of Commerce determines that such species should--
 - (i) be listed as an endangered species or a threatened species, or
 - (ii) be changed in status from a threatened species to an endangered species,

he shall so inform the Secretary of the Interior, who shall list such species in accordance with this section;

- (B) in any case in which the Secretary of Commerce determines that such species should--
 - (i) be removed from any list published pursuant to subsection (c) of this section, or
 - (ii) be changed in status from an endangered species to a threatened species,

he shall recommend such action to the Secretary of the Interior, and the Secretary of the Interior, if he concurs in the recommendation, shall implement such action; and

(C) the Secretary of the Interior may not list or remove from any list any such species, and may not change the

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status of any such species which are listed, without a prior favorable determination made pursuant to this section by the Secretary of Commerce.

- (3)(A) The Secretary, by regulation promulgated in accordance with subsection (b) and to the maximum extent prudent and determinable--
 - (i) shall, concurrently with making a determination under paragraph (1) that a species is an endangered species or a threatened species, designate any habitat of such species which is then considered to be critical habitat; and
 - (ii) may, from time-to-time thereafter as appropriate, revise such designation.
- (B)(i) The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 670a of this title, if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.
- (ii) Nothing in this paragraph affects the requirement to consult under section 1536(a)(2) of this title with respect to an agency action (as that term is defined in that section).
- (iii) Nothing in this paragraph affects the obligation of the Department of Defense to comply with section 1538 of

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this title, including the prohibition preventing extinction and taking of endangered species and threatened species.

(b) Basis for determinations

- (1)(A) The Secretary shall make determinations required by subsection (a)(1) solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.
- **(B)** In carrying out this section, the Secretary shall give consideration to species which have been--
 - (i) designated as requiring protection from unrestricted commerce by any foreign nation, or pursuant to any international agreement; or
 - (ii) identified as in danger of extinction, or likely to become so within the foreseeable future, by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish or wildlife or plants.
- (2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) on the basis of the best scientific data available and after taking into

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consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

- (3)(A) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of Title 5, to add a species to, or to remove a species from, either of the lists published under subsection (c), the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned. The Secretary shall promptly publish each finding made under this subparagraph in the Federal Register.
- (B) Within 12 months after receiving a petition that is found under subparagraph (A) to present substantial information indicating that the petitioned action may be warranted, the Secretary shall make one of the following findings:
 - (i) The petitioned action is not warranted, in which case the Secretary shall promptly publish such finding in the Federal Register.

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- (ii) The petitioned action is warranted, in which case the Secretary shall promptly publish in the Federal Register a general notice and the complete text of a proposed regulation to implement such action in accordance with paragraph (5).
- (iii) The petitioned action is warranted, but that--
 - (I) the immediate proposal and timely promulgation of a final regulation implementing the petitioned action in accordance with paragraphs (5) and (6) is precluded by pending proposals to determine whether any species is an endangered species or a threatened species, and
 - (II) expeditious progress is being made to add qualified species to either of the lists published under subsection (c) and to remove from such lists species for which the protections of this chapter are no longer necessary,

in which case the Secretary shall promptly publish such finding in the Federal Register, together with a description and evaluation of the reasons and data on which the finding is based.

(C)(i) A petition with respect to which a finding is made under subparagraph (B)(iii) shall be treated as a petition that is resubmitted to the Secretary under subparagraph (A) on the date of such finding and that presents substantial scientific or commercial information that the petitioned action may be warranted.

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- (ii) Any negative finding described in subparagraph (A) and any finding described in subparagraph (B)(i) or (iii) shall be subject to judicial review.
- (iii) The Secretary shall implement a system to monitor effectively the status of all species with respect to which a finding is made under subparagraph (B)(iii) and shall make prompt use of the authority under paragraph 7¹ to prevent a significant risk to the well being of any such species.
- (D)(i) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of Title 5, to revise a critical habitat designation, the Secretary shall make a finding as to whether the petition presents substantial scientific information indicating that the revision may be warranted. The Secretary shall promptly publish such finding in the Federal Register.
- (ii) Within 12 months after receiving a petition that is found under clause (i) to present substantial information indicating that the requested revision may be warranted, the Secretary shall determine how he intends to proceed with the requested revision, and shall promptly publish notice of such intention in the Federal Register.
- (4) Except as provided in paragraphs (5) and (6) of this subsection, the provisions of section 553 of Title 5 (relating to rulemaking procedures), shall apply to any regulation promulgated to carry out the purposes of this chapter.

^{1.} So in original. Probably should be "paragraph (7)".

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- (5) With respect to any regulation proposed by the Secretary to implement a determination, designation, or revision referred to in subsection (a)(1) or (3), the Secretary shall--
 - (A) not less than 90 days before the effective date of the regulation--
 - (i) publish a general notice and the complete text of the proposed regulation in the Federal Register, and
 - (ii) give actual notice of the proposed regulation (including the complete text of the regulation) to the State agency in each State in which the species is believed to occur, and to each county or equivalent jurisdiction in which the species is believed to occur, and invite the comment of such agency, and each such jurisdiction, thereon;
 - (B) insofar as practical, and in cooperation with the Secretary of State, give notice of the proposed regulation to each foreign nation in which the species is believed to occur or whose citizens harvest the species on the high seas, and invite the comment of such nation thereon;
 - (C) give notice of the proposed regulation to such professional scientific organizations as he deems appropriate;
 - (D) publish a summary of the proposed regulation in a newspaper of general circulation in each area of

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the United States in which the species is believed to occur; and

- (E) promptly hold one public hearing on the proposed regulation if any person files a request for such a hearing within 45 days after the date of publication of general notice.
- (6)(A) Within the one-year period beginning on the date on which general notice is published in accordance with paragraph (5)(A)(i) regarding a proposed regulation, the Secretary shall publish in the Federal Register--
 - (i) if a determination as to whether a species is an endangered species or a threatened species, or a revision of critical habitat, is involved, either--
 - (I) a final regulation to implement such determination,
 - (II) a final regulation to implement such revision or a finding that such revision should not be made,
 - (III) notice that such one-year period is being extended under subparagraph (B)(i), or
 - (IV) notice that the proposed regulation is being withdrawn under subparagraph (B)(ii), together with the finding on which such withdrawal is based; or

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- (ii) subject to subparagraph (C), if a designation of critical habitat is involved, either--
 - (I) a final regulation to implement such designation, or
 - (II) notice that such one-year period is being extended under such subparagraph.
- (B)(i) If the Secretary finds with respect to a proposed regulation referred to in subparagraph (A)(i) that there is substantial disagreement regarding the sufficiency or accuracy of the available data relevant to the determination or revision concerned, the Secretary may extend the one-year period specified in subparagraph (A) for not more than six months for purposes of soliciting additional data.
- (ii) If a proposed regulation referred to in subparagraph (A)(i) is not promulgated as a final regulation within such one-year period (or longer period if extension under clause (i) applies) because the Secretary finds that there is not sufficient evidence to justify the action proposed by the regulation, the Secretary shall immediately withdraw the regulation. The finding on which a withdrawal is based shall be subject to judicial review. The Secretary may not propose a regulation that has previously been withdrawn under this clause unless he determines that sufficient new information is available to warrant such proposal.
- (iii) If the one-year period specified in subparagraph (A) is extended under clause (i) with respect to a proposed

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regulation, then before the close of such extended period the Secretary shall publish in the Federal Register either a final regulation to implement the determination or revision concerned, a finding that the revision should not be made, or a notice of withdrawal of the regulation under clause (ii), together with the finding on which the withdrawal is based.

- (C) A final regulation designating critical habitat of an endangered species or a threatened species shall be published concurrently with the final regulation implementing the determination that such species is endangered or threatened, unless the Secretary deems that--
 - (i) it is essential to the conservation of such species that the regulation implementing such determination be promptly published; or
 - (ii) critical habitat of such species is not then determinable, in which case the Secretary, with respect to the proposed regulation to designate such habitat, may extend the one-year period specified in subparagraph (A) by not more than one additional year, but not later than the close of such additional year the Secretary must publish a final regulation, based on such data as may be available at that time, designating, to the maximum extent prudent, such habitat.
- (7) Neither paragraph (4), (5), or (6) of this subsection nor section 553 of Title 5 shall apply to any regulation issued by the Secretary in regard to any emergency posing a

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significant risk to the well-being of any species of fish or wildlife or plants, but only if--

- (A) at the time of publication of the regulation in the Federal Register the Secretary publishes therein detailed reasons why such regulation is necessary; and
- (B) in the case such regulation applies to resident species of fish or wildlife, or plants, the Secretary gives actual notice of such regulation to the State agency in each State in which such species is believed to occur.

Such regulation shall, at the discretion of the Secretary, take effect immediately upon the publication of the regulation in the Federal Register. Any regulation promulgated under the authority of this paragraph shall cease to have force and effect at the close of the 240-day period following the date of publication unless, during such 240-day period, the rulemaking procedures which would apply to such regulation without regard to this paragraph are complied with. If at any time after issuing an emergency regulation the Secretary determines, on the basis of the best appropriate data available to him, that substantial evidence does not exist to warrant such regulation, he shall withdraw it.

(8) The publication in the Federal Register of any proposed or final regulation which is necessary or appropriate to carry out the purposes of this chapter shall include a summary by the Secretary of the data on which such regulation is based and shall show the relationship of such data to such regulation; and if such regulation

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designates or revises critical habitat, such summary shall, to the maximum extent practicable, also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify such habitat, or may be affected by such designation.

(c) Lists

(1) The Secretary of the Interior shall publish in the Federal Register a list of all species determined by him or the Secretary of Commerce to be endangered species and a list of all species determined by him or the Secretary of Commerce to be threatened species. Each list shall refer to the species contained therein by scientific and common name or names, if any, specify with respect to each such species over what portion of its range it is endangered or threatened, and specify any critical habitat within such range. The Secretary shall from time to time revise each list published under the authority of this subsection to reflect recent determinations, designations, and revisions made in accordance with subsections (a) and (b).

(2) The Secretary shall--

- (A) conduct, at least once every five years, a review of all species included in a list which is published pursuant to paragraph (1) and which is in effect at the time of such review; and
- (B) determine on the basis of such review whether any such species should--

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- (i) be removed from such list;
- (ii) be changed in status from an endangered species to a threatened species; or
- (iii) be changed in status from a threatened species to an endangered species.

Each determination under subparagraph (B) shall be made in accordance with the provisions of subsections (a) and (b).

(d) Protective regulations

Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species. The Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 1538(a)(1) of this title, in the case of fish or wildlife, or section 1538(a)(2) of this title, in the case of plants, with respect to endangered species; except that with respect to the taking of resident species of fish or wildlife, such regulations shall apply in any State which has entered into a cooperative agreement pursuant to section 1535(c) of this title only to the extent that such regulations have also been adopted by such State.

(e) Similarity of appearance cases

The Secretary may, by regulation of commerce or taking, and to the extent he deems advisable, treat any species as

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an endangered species or threatened species even though it is not listed pursuant to this section if he finds that--

- (A) such species so closely resembles in appearance, at the point in question, a species which has been listed pursuant to such section that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species;
- (B) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and
- (C) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of this chapter.

(f) Recovery plans

- (1) The Secretary shall develop and implement plans (hereinafter in this subsection referred to as "recovery plans") for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species. The Secretary, in developing and implementing recovery plans, shall, to the maximum extent practicable--
 - (A) give priority to those endangered species or threatened species, without regard to taxonomic classification, that are most likely to benefit from such plans, particularly those species that are, or may be,

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in conflict with construction or other development projects or other forms of economic activity;

- (B) incorporate in each plan--
 - (i) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species;
 - (ii) objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list; and
 - (iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.
- (2) The Secretary, in developing and implementing recovery plans, may procure the services of appropriate public and private agencies and institutions, and other qualified persons. Recovery teams appointed pursuant to this subsection shall not be subject to chapter 10 of Title 5.
- (3) The Secretary shall report every two years to the Committee on Environment and Public Works of the Senate and the Committee on Merchant Marine and Fisheries of the House of Representatives on the status of efforts to develop and implement recovery plans for all species listed pursuant to this section and on the status of all species for which such plans have been developed.

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- (4) The Secretary shall, prior to final approval of a new or revised recovery plan, provide public notice and an opportunity for public review and comment on such plan. The Secretary shall consider all information presented during the public comment period prior to approval of the plan.
- (5) Each Federal agency shall, prior to implementation of a new or revised recovery plan, consider all information presented during the public comment period under paragraph (4).

(g) Monitoring

- (1) The Secretary shall implement a system in cooperation with the States to monitor effectively for not less than five years the status of all species which have recovered to the point at which the measures provided pursuant to this chapter are no longer necessary and which, in accordance with the provisions of this section, have been removed from either of the lists published under subsection (c).
- (2) The Secretary shall make prompt use of the authority under paragraph 7^1 of subsection (b) of this section to prevent a significant risk to the well being of any such recovered species.

^{1.} So in original. Probably should be "paragraph (7)".

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(h) Agency guidelines; publication in Federal Register; scope; proposals and amendments: notice and opportunity for comments

The Secretary shall establish, and publish in the Federal Register, agency guidelines to insure that the purposes of this section are achieved efficiently and effectively. Such guidelines shall include, but are not limited to--

- (1) procedures for recording the receipt and the disposition of petitions submitted under subsection (b) (3) of this section;
- (2) criteria for making the findings required under such subsection with respect to petitions;
- (3) a ranking system to assist in the identification of species that should receive priority review under subsection (a)(1) of this section; and
- (4) a system for developing and implementing, on a priority basis, recovery plans under subsection (f) of this section.

The Secretary shall provide to the public notice of, and opportunity to submit written comments on, any guideline (including any amendment thereto) proposed to be established under this subsection.

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(i) Submission to State agency of justification for regulations inconsistent with State agency's comments or petition

If, in the case of any regulation proposed by the Secretary under the authority of this section, a State agency to which notice thereof was given in accordance with subsection (b) (5)(A)(ii) files comments disagreeing with all or part of the proposed regulation, and the Secretary issues a final regulation which is in conflict with such comments, or if the Secretary fails to adopt a regulation pursuant to an action petitioned by a State agency under subsection (b)(3), the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition.

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16 U.S.C.A. § 1536

§ 1536. Interagency cooperation

(a) Federal agency actions and consultations

- (1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this chapter. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 1533 of this title.
- (2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.
- (3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the

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Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 1533 of this title or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d).

(b) Opinion of Secretary

- (1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency.
- (B) In the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A)--

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- (i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth--
 - (I) the reasons why a longer period is required,
 - (II) the information that is required to complete the consultation, and
 - (III) the estimated date on which consultation will be completed; or
- (ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to such period.

The Secretary and the Federal agency may mutually agree to extend a consultation period established under the preceding sentence if the Secretary, before the close of such period, obtains the consent of the applicant to the extension.

- (2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned.
- (3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a), the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion,

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and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

- (B) Consultation under subsection (a)(3), and an opinion issued by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2), and as an opinion issued after consultation under such subsection, regarding that action if the Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation.
- (4) If after consultation under subsection (a)(2), the Secretary concludes that--
 - (A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection;
 - (B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection; and

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(C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 1371(a)(5) of this title;

the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that-

- (i) specifies the impact of such incidental taking on the species,
- (ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,
- (iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 1371(a)(5) of this title with regard to such taking, and
- (iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

(c) Biological assessment

(1) To facilitate compliance with the requirements of subsection (a)(2), each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on November 10, 1978, request of the Secretary information whether any species which is

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listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as is mutually agreed to by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefor) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(2) Any person who may wish to apply for an exemption under subsection (g) of this section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency.

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(d) Limitation on commitment of resources

After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2) of this section.

(e) Endangered Species Committee

- (1) There is established a committee to be known as the Endangered Species Committee (hereinafter in this section referred to as the "Committee").
- (2) The Committee shall review any application submitted to it pursuant to this section and determine in accordance with subsection (h) of this section whether or not to grant an exemption from the requirements of subsection (a)(2) of this section for the action set forth in such application.
- (3) The Committee shall be composed of seven members as follows:
 - (A) The Secretary of Agriculture.
 - (B) The Secretary of the Army.
 - (C) The Chairman of the Council of Economic Advisors.

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- (D) The Administrator of the Environmental Protection Agency.
- (E) The Secretary of the Interior.
- (F) The Administrator of the National Oceanic and Atmospheric Administration.
- (G) The President, after consideration of any recommendations received pursuant to subsection (g)(2)(B) shall appoint one individual from each affected State, as determined by the Secretary, to be a member of the Committee for the consideration of the application for exemption for an agency action with respect to which such recommendations are made, not later than 30 days after an application is submitted pursuant to this section.
- (4)(A) Members of the Committee shall receive no additional pay on account of their service on the Committee.
- (B) While away from their homes or regular places of business in the performance of services for the Committee, members of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of Title 5.
- (5)(A) Five members of the Committee or their representatives shall constitute a quorum for the

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transaction of any function of the Committee, except that, in no case shall any representative be considered in determining the existence of a quorum for the transaction of any function of the Committee if that function involves a vote by the Committee on any matter before the Committee.

- (B) The Secretary of the Interior shall be the Chairman of the Committee.
- (C) The Committee shall meet at the call of the Chairman or five of its members.
- **(D)** All meetings and records of the Committee shall be open to the public.
- (6) Upon request of the Committee, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Committee to assist it in carrying out its duties under this section.
- (7)(A) The Committee may for the purpose of carrying out its duties under this section hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Committee deems advisable.
- (B) When so authorized by the Committee, any member or agent of the Committee may take any action which the Committee is authorized to take by this paragraph.
- (C) Subject to the Privacy Act, the Committee may secure directly from any Federal agency information necessary

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to enable it to carry out its duties under this section. Upon request of the Chairman of the Committee, the head of such Federal agency shall furnish such information to the Committee.

- (D) The Committee may use the United States mails in the same manner and upon the same conditions as a Federal agency.
- (E) The Administrator of General Services shall provide to the Committee on a reimbursable basis such administrative support services as the Committee may request.
- (8) In carrying out its duties under this section, the Committee may promulgate and amend such rules, regulations, and procedures, and issue and amend such orders as it deems necessary.
- (9) For the purpose of obtaining information necessary for the consideration of an application for an exemption under this section the Committee may issue subpense for the attendance and testimony of witnesses and the production of relevant papers, books, and documents.
- (10) In no case shall any representative, including a representative of a member designated pursuant to paragraph (3)(G) of this subsection, be eligible to cast a vote on behalf of any member.

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(f) Promulgation of regulations; form and contents of exemption application

Not later than 90 days after November 10, 1978, the Secretary shall promulgate regulations which set forth the form and manner in which applications for exemption shall be submitted to the Secretary and the information to be contained in such applications.

Such regulations shall require that information submitted in an application by the head of any Federal agency with respect to any agency action include, but not be limited to-

- (1) a description of the consultation process carried out pursuant to subsection (a)(2) of this section between the head of the Federal agency and the Secretary; and
- (2) a statement describing why such action cannot be altered or modified to conform with the requirements of subsection (a)(2) of this section.

(g) Application for exemption; report to Committee

(1) A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a)(2), the Secretary's opinion under subsection (b) indicates that the agency action would violate subsection (a)(2). An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be

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considered by the Committee for a final determination under subsection (h) after a report is made pursuant to paragraph (5). The applicant for an exemption shall be referred to as the "exemption applicant" in this section.

- (2)(A) An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f), not later than 90 days after the completion of the consultation process; except that, in the case of any agency action involving a permit or license applicant, such application shall be submitted not later than 90 days after the date on which the Federal agency concerned takes final agency action with respect to the issuance of the permit or license. For purposes of the preceding sentence, the term "final agency action" means (i) a disposition by an agency with respect to the issuance of a permit or license that is subject to administrative review, whether or not such disposition is subject to judicial review; or (ii) if administrative review is sought with respect to such disposition, the decision resulting after such review. Such application shall set forth the reasons why the exemption applicant considers that the agency action meets the requirements for an exemption under this subsection.
- (B) Upon receipt of an application for exemption for an agency action under paragraph (1), the Secretary shall promptly (i) notify the Governor of each affected State, if any, as determined by the Secretary, and request the Governors so notified to recommend individuals to be appointed to the Endangered Species Committee for consideration of such application; and (ii) publish notice of receipt of the application in the Federal Register, including

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a summary of the information contained in the application and a description of the agency action with respect to which the application for exemption has been filed.

- (3) The Secretary shall within 20 days after the receipt of an application for exemption, or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary--
 - (A) determine that the Federal agency concerned and the exemption applicant have--
 - (i) carried out the consultation responsibilities described in subsection (a) in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2);
 - (ii) conducted any biological assessment required by subsection (c); and
 - (iii) to the extent determinable within the time provided herein, refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d); or
 - (B) deny the application for exemption because the Federal agency concerned or the exemption applicant have not met the requirements set forth in subparagraph (A)(i), (ii), and (iii).

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The denial of an application under subparagraph (B) shall be considered final agency action for purposes of chapter 7 of Title 5.

- (4) If the Secretary determines that the Federal agency concerned and the exemption applicant have met the requirements set forth in paragraph (3)(A)(i), (ii), and (iii) he shall, in consultation with the Members of the Committee, hold a hearing on the application for exemption in accordance with sections 554, 555, and 556 (other than subsection (b)(1) and (2) thereof) of Title 5 and prepare the report to be submitted pursuant to paragraph (5).
- (5) Within 140 days after making the determinations under paragraph (3) or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, the Secretary shall submit to the Committee a report discussing--
 - (A) the availability of reasonable and prudent alternatives to the agency action, and the nature and extent of the benefits of the agency action and of alternative courses of action consistent with conserving the species or the critical habitat;
 - (B) a summary of the evidence concerning whether or not the agency action is in the public interest and is of national or regional significance;
 - (C) appropriate reasonable mitigation and enhancement measures which should be considered by the Committee; and

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- (**D**) whether the Federal agency concerned and the exemption applicant refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d).
- (6) To the extent practicable within the time required for action under subsection (g) of this section, and except to the extent inconsistent with the requirements of this section, the consideration of any application for an exemption under this section and the conduct of any hearing under this subsection shall be in accordance with sections 554, 555, and 556 (other than subsection (b)(3) of section 556) of Title 5.
- (7) Upon request of the Secretary, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Secretary to assist him in carrying out his duties under this section.
- (8) All meetings and records resulting from activities pursuant to this subsection shall be open to the public.

(h) Grant of exemption

(1) The Committee shall make a final determination whether or not to grant an exemption within 30 days after receiving the report of the Secretary pursuant to subsection (g)(5). The Committee shall grant an exemption from the requirements of subsection (a)(2) for an agency action if, by a vote of not less than five of its members voting in person--

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- (A) it determines on the record, based on the report of the Secretary, the record of the hearing held under subsection (g)(4) and on such other testimony or evidence as it may receive, that--
 - (i) there are no reasonable and prudent alternatives to the agency action;
 - (ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;
 - (iii) the action is of regional or national significance; and
 - (iv) neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources prohibited by subsection (d); and
- (B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement, as are necessary and appropriate to minimize the adverse effects of the agency action upon the endangered species, threatened species, or critical habitat concerned.

Any final determination by the Committee under this subsection shall be considered final agency action for purposes of chapter 7 of Title 5.

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- (2)(A) Except as provided in subparagraph (B), an exemption for an agency action granted under paragraph (1) shall constitute a permanent exemption with respect to all endangered or threatened species for the purposes of completing such agency action--
 - (i) regardless whether the species was identified in the biological assessment; and
 - (ii) only if a biological assessment has been conducted under subsection (c) with respect to such agency action.
- (B) An exemption shall be permanent under subparagraph (A) unless--
 - (i) the Secretary finds, based on the best scientific and commercial data available, that such exemption would result in the extinction of a species that was not the subject of consultation under subsection (a)(2) or was not identified in any biological assessment conducted under subsection (c), and
 - (ii) the Committee determines within 60 days after the date of the Secretary's finding that the exemption should not be permanent.

If the Secretary makes a finding described in clause (i), the Committee shall meet with respect to the matter within 30 days after the date of the finding.

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(i) Review by Secretary of State; violation of international treaty or other international obligation of United States

Notwithstanding any other provision of this chapter, the Committee shall be prohibited from considering for exemption any application made to it, if the Secretary of State, after a review of the proposed agency action and its potential implications, and after hearing, certifies, in writing, to the Committee within 60 days of any application made under this section that the granting of any such exemption and the carrying out of such action would be in violation of an international treaty obligation or other international obligation of the United States. The Secretary of State shall, at the time of such certification, publish a copy thereof in the Federal Register.

(j) Exemption for national security reasons

Notwithstanding any other provision of this chapter, the Committee shall grant an exemption for any agency action if the Secretary of Defense finds that such exemption is necessary for reasons of national security.

(k) Exemption decision not considered major Federal action; environmental impact statement

An exemption decision by the Committee under this section shall not be a major Federal action for purposes of the National Environmental Policy Act of 1969: Provided, That an environmental impact statement which discusses the impacts upon endangered species or threatened

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species or their critical habitats shall have been previously prepared with respect to any agency action exempted by such order.

- (1) Committee order granting exemption; cost of mitigation and enhancement measures; report by applicant to Council on Environmental Quality
- (1) If the Committee determines under subsection (h) that an exemption should be granted with respect to any agency action, the Committee shall issue an order granting the exemption and specifying the mitigation and enhancement measures established pursuant to subsection (h) which shall be carried out and paid for by the exemption applicant in implementing the agency action. All necessary mitigation and enhancement measures shall be authorized prior to the implementing of the agency action and funded concurrently with all other project features.
- (2) The applicant receiving such exemption shall include the costs of such mitigation and enhancement measures within the overall costs of continuing the proposed action. Notwithstanding the preceding sentence the costs of such measures shall not be treated as project costs for the purpose of computing benefit-cost or other ratios for the proposed action. Any applicant may request the Secretary to carry out such mitigation and enhancement measures. The costs incurred by the Secretary in carrying out any such measures shall be paid by the applicant receiving the exemption. No later than one year after the granting of an exemption, the exemption applicant shall submit to the Council on Environmental Quality a report describing

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its compliance with the mitigation and enhancement measures prescribed by this section. Such a report shall be submitted annually until all such mitigation and enhancement measures have been completed. Notice of the public availability of such reports shall be published in the Federal Register by the Council on Environmental Quality.

(m) Notice requirement for citizen suits not applicable

The 60-day notice requirement of section 1540(g) of this title shall not apply with respect to review of any final determination of the Committee under subsection (h) of this section granting an exemption from the requirements of subsection (a)(2) of this section.

(n) Judicial review

Any person, as defined by section 1532(13) of this title, may obtain judicial review, under chapter 7 of Title 5, of any decision of the Endangered Species Committee under subsection (h) in the United States Court of Appeals for (1) any circuit wherein the agency action concerned will be, or is being, carried out, or (2) in any case in which the agency action will be, or is being, carried out outside of any circuit, the District of Columbia, by filing in such court within 90 days after the date of issuance of the decision, a written petition for review. A copy of such petition shall be transmitted by the clerk of the court to the Committee and the Committee shall file in the court the record in the proceeding, as provided in section 2112 of Title 28. Attorneys designated by the Endangered Species

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Committee may appear for, and represent the Committee in any action for review under this subsection.

(o) Exemption as providing exception on taking of endangered species

Notwithstanding sections 1533(d) and 1538(a)(1)(B) and (C) of this title, sections 1371 and 1372 of this title, or any regulation promulgated to implement any such section--

- (1) any action for which an exemption is granted under subsection (h) shall not be considered to be a taking of any endangered species or threatened species with respect to any activity which is necessary to carry out such action; and
- (2) any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv) shall not be considered to be a prohibited taking of the species concerned.

(p) Exemptions in Presidentially declared disaster areas

In any area which has been declared by the President to be a major disaster area under the Disaster Relief and Emergency Assistance Act, the President is authorized to make the determinations required by subsections (g) and (h) of this section for any project for the repair or replacement of a public facility substantially as it existed prior to the disaster under section 405 or 406 of the Disaster Relief and Emergency Assistance Act,

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and which the President determines (1) is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life, and (2) to involve an emergency situation which does not allow the ordinary procedures of this section to be followed. Notwithstanding any other provision of this section, the Committee shall accept the determinations of the President under this subsection.

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50 C.F.R. § 402.14

§ 402.14 Formal consultation.

Effective: May 6, 2024

(a) Requirement for formal consultation. Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required, except as noted in paragraph (b) of this section. The Director may request a Federal agency to enter into consultation if he identifies any action of that agency that may affect listed species or critical habitat and for which there has been no consultation. When such a request is made, the Director shall forward to the Federal agency a written explanation of the basis for the request.

(b) Exceptions.

- (1) A Federal agency need not initiate formal consultation if, as a result of the preparation of a biological assessment under § 402.12 or as a result of informal consultation with the Service under § 402.13, the Federal agency determines, with the written concurrence of the Director, that the proposed action is not likely to adversely affect any listed species or critical habitat.
- (2) A Federal agency need not initiate formal consultation if a preliminary biological opinion, issued after early consultation under § 402.11, is confirmed as the final biological opinion.

- (c) Initiation of formal consultation.
 - (1) A written request to initiate formal consultation shall be submitted to the Director and shall include:
 - (i) A description of the proposed action, including any measures intended to avoid, minimize, or offset effects of the action. Consistent with the nature and scope of the proposed action, the description shall provide sufficient detail to assess the effects of the action on listed species and critical habitat, including:
 - (A) The purpose of the action;
 - (B) The duration and timing of the action;
 - (C) The location of the action;
 - (D) The specific components of the action and how they will be carried out;
 - (E) Maps, drawings, blueprints, or similar schematics of the action; and
 - (F) Any other available information related to the nature and scope of the proposed action relevant to its effects on listed species or designated critical habitat.
 - (ii) A map or description of all areas to be affected directly or indirectly by the Federal action, and not merely the immediate area involved in the action (i.e., the action area as defined at § 402.02).

- (iii) Information obtained by or in the possession of the Federal agency and any applicant on the listed species and designated critical habitat in the action area (as required by paragraph (c)(1)(ii) of this section), including available information such as the presence, abundance, density, or periodic occurrence of listed species and the condition and location of the species' habitat, including any critical habitat.
- (iv) A description of the effects of the action and an analysis of any cumulative effects.
- (v) A summary of any relevant information provided by the applicant, if available.
- (vi) Any other relevant available information on the effects of the proposed action on listed species or designated critical habitat, including any relevant reports such as environmental impact statements and environmental assessments.
- (2) A Federal agency may submit existing documents prepared for the proposed action such as NEPA analyses or other reports in substitution for the initiation package outlined in this paragraph (c). However, any such substitution shall be accompanied by a written summary specifying the location of the information that satisfies the elements above in the submitted document(s).
- (3) Formal consultation shall not be initiated by the Federal agency until any required biological

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assessment has been completed and submitted to the Director in accordance with § 402.12.

- (4) Any request for formal consultation may encompass, subject to the approval of the Director, a number of similar individual actions within a given geographical area, a programmatic consultation, or a segment of a comprehensive plan. The provision in this paragraph (c)(4) does not relieve the Federal agency of the requirements for considering the effects of the action or actions as a whole.
- (d) Responsibility to provide best scientific and commercial data available. The Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat. This information may include the results of studies or surveys conducted by the Federal agency or the designated non-Federal representative. The Federal agency shall provide any applicant with the opportunity to submit information for consideration during the consultation.
- (e) Duration and extension of formal consultation. Formal consultation concludes within 90 days after its initiation unless extended as provided below. If an applicant is not involved, the Service and the Federal agency may mutually agree to extend the consultation for a specific time period. If an applicant is involved, the Service and the Federal agency may mutually agree to extend the consultation

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provided that the Service submits to the applicant, before the close of the 90 days, a written statement setting forth:

- (1) The reasons why a longer period is required,
- (2) The information that is required to complete the consultation, and
- (3) The estimated date on which the consultation will be completed.

A consultation involving an applicant cannot be extended for more than 60 days without the consent of the applicant. Within 45 days after concluding formal consultation, the Service shall deliver a biological opinion to the Federal agency and any applicant.

(f) Additional data. When the Service determines that additional data would provide a better information base from which to formulate a biological opinion, the Director may request an extension of formal consultation and request that the Federal agency obtain additional data to determine how or to what extent the action may affect listed species or critical habitat. If formal consultation is extended by mutual agreement according to § 402.14(e), the Federal agency shall obtain, to the extent practicable, that data which can be developed within the scope of the extension. The responsibility for conducting and funding any studies belongs to the Federal agency and the applicant, not the Service. The Service's request for additional data is not to be construed as the Service's opinion that the Federal agency has failed to satisfy the

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information standard of section 7(a)(2) of the Act. If no extension of formal consultation is agreed to, the Director will issue a biological opinion using the best scientific and commercial data available.

- (g) Service responsibilities. Service responsibilities during formal consultation are as follows:
 - (1) Review all relevant information provided by the Federal agency or otherwise available. Such review may include an on-site inspection of the action area with representatives of the Federal agency and the applicant.
 - (2) Evaluate the current status and environmental baseline of the listed species or critical habitat.
 - (3) Evaluate the effects of the action and cumulative effects on the listed species or critical habitat.
 - (4) Add the effects of the action and cumulative effects to the environmental baseline and in light of the status of the species and critical habitat, formulate the Service's opinion as to whether the action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.
 - (5) Discuss with the Federal agency and any applicant the Service's review and evaluation conducted under paragraphs (g)(1)–(3) of this section, the basis for any finding in the biological opinion, and the availability

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of reasonable and prudent alternatives (if a jeopardy opinion is to be issued) that the agency and the applicant can take to avoid violation of section 7(a) (2). The Service will utilize the expertise of the Federal agency and any applicant in identifying these alternatives. If requested, the Service shall make available to the Federal agency the draft biological opinion for the purpose of analyzing the reasonable and prudent alternatives. The 45-day period in which the biological opinion must be delivered will not be suspended unless the Federal agency secures the written consent of the applicant to an extension to a specific date. The applicant may request a copy of the draft opinion from the Federal agency. All comments on the draft biological opinion must be submitted to the Service through the Federal agency, although the applicant may send a copy of its comments directly to the Service. The Service will not issue its biological opinion prior to the 45-day or extended deadline while the draft is under review by the Federal agency. However, if the Federal agency submits comments to the Service regarding the draft biological opinion within 10 days of the deadline for issuing the opinion, the Service is entitled to an automatic 10-day extension on the deadline.

(6) Formulate discretionary conservation recommendations, if any, which will assist the Federal agency in reducing or eliminating the impacts that its proposed action may have on listed species or critical habitat.

- (7) Formulate a statement concerning incidental take, if such take is reasonably certain to occur.
- (8) In formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions as proposed or taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation. Measures included in the proposed action or a reasonable and prudent alternative that are intended to avoid, minimize, or offset the effects of an action are considered like other portions of the action and do not require any additional demonstration of binding plans.
- (h) Biological opinions.
 - (1) The biological opinion shall include:
 - (i) A summary of the information on which the opinion is based;
 - (ii) A detailed discussion of the environmental baseline of the listed species and critical habitat;
 - (iii) A detailed discussion of the effects of the action on listed species or critical habitat; and
 - (iv) The Service's opinion on whether the action is:

- (A) Likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "jeopardy" biological opinion); or
- (B) Not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "no jeopardy" biological opinion).
- (2) A "jeopardy" biological opinion shall include reasonable and prudent alternatives, if any. If the Service is unable to develop such alternatives, the Service will indicate that to the best of its knowledge there are no reasonable and prudent alternatives.
- (3) The Service may adopt all or part of:
- (i) A Federal agency's initiation package; or
- (ii) The Service's analysis required to issue a permit under section 10(a) of the Act in its biological opinion.
- (4) A Federal agency and the Service may agree to follow an optional collaborative process that would further the ability of the Service to adopt the information and analysis provided by the Federal agency during consultation in the development of the Service's biological opinion to improve efficiency in the consultation process and reduce duplicative efforts. The Federal agency and the Service shall consider the nature, size, and scope of the action or its

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anticipated effects on listed species or critical habitat, and other relevant factors to determine whether an action or a class of actions is appropriate for this process. The Federal agency and the Service may develop coordination procedures that would facilitate adoption of the initiation package with any necessary supplementary analyses and incidental take statement to be added by the Service, if appropriate, as the Service's biological opinion in fulfillment of section 7(b) of the Act.

(i) Incidental take.

- (1) In those cases where the Service concludes that an action (or the implementation of any reasonable and prudent alternatives) and the resultant incidental take of listed species will not violate section 7(a)(2), and, in the case of marine mammals, where the taking is authorized pursuant to section 101(a)(5) of the Marine Mammal Protection Act of 1972, the Service will provide with the biological opinion a statement concerning incidental take that:
- (i) Specifies the impact of incidental taking as the amount or extent of such taking. A surrogate (e.g., similarly affected species or habitat or ecological conditions) may be used to express the amount or extent of anticipated take, provided that the biological opinion or incidental take statement: Describes the causal link between the surrogate and take of the listed species, explains why it is not practical to express the amount or extent of anticipated take or to

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monitor take-related impacts in terms of individuals of the listed species, and sets a clear standard for determining when the level of anticipated take has been exceeded:

- (ii) Specifies those reasonable and prudent measures that the Director considers necessary or appropriate to minimize such impact of incidental taking on the species;
- (iii) In the case of marine mammals, specifies those measures that are necessary to comply with section 101(a)(5) of the Marine Mammal Protection Act of 1972 and applicable regulations with regard to such taking;
- (iv) Sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or any applicant to implement the measures specified under paragraphs (i)(1)(ii) and (iii) of this section; and
- (v) Specifies the procedures to be used to handle or dispose of any individuals of a species actually taken.
- (2) Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action, may involve only minor changes, and may include measures implemented inside or outside of the action area that avoid, reduce, or offset the impact of incidental take.

- (3) Priority should be given to developing reasonable and prudent measures and terms and conditions that avoid or reduce the amount or extent of incidental taking anticipated to occur within the action area. To the extent it is anticipated that the action will cause incidental take that cannot feasibly be avoided or reduced in the action area, the Services may set forth additional reasonable and prudent measures and terms and conditions that serve to minimize the impact of such taking on the species inside or outside the action area.
- (4) In order to monitor the impacts of incidental take, the Federal agency or any applicant must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. The reporting requirements will be established in accordance with 50 CFR 13.45 and 18.27 for FWS and 50 CFR 216.105 and 222.301(h) for NMFS.
- (5) If during the course of the action the amount or extent of incidental taking, as specified under paragraph (i)(1)(i) of this section, is exceeded, the Federal agency must reinitiate consultation immediately.
- (6) Any taking that is subject to a statement as specified in paragraph (i)(1) of this section and that is in compliance with the terms and conditions of that statement is not a prohibited taking under the Act,

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and no other authorization or permit under the Act is required.

- (7) For a framework programmatic action, an incidental take statement is not required at the programmatic level; any incidental take resulting from any action subsequently authorized, funded, or carried out under the program will be addressed in subsequent section 7 consultation, as appropriate. For a mixed programmatic action, an incidental take statement is required at the programmatic level only for those program actions that are reasonably certain to cause take and are not subject to further section 7 consultation.
- (j) Conservation recommendations. The Service may provide with the biological opinion a statement containing discretionary conservation recommendations. Conservation recommendations are advisory and are not intended to carry any binding legal force.
- (k) Incremental steps. When the action is authorized by a statute that allows the agency to take incremental steps toward the completion of the action, the Service shall, if requested by the Federal agency, issue a biological opinion on the incremental step being considered, including its views on the entire action. Upon the issuance of such a biological opinion, the Federal agency may proceed with or authorize the incremental steps of the action if:
 - (1) The biological opinion does not conclude that the incremental step would violate section 7(a)(2);

- (2) The Federal agency continues consultation with respect to the entire action and obtains biological opinions, as required, for each incremental step;
- (3) The Federal agency fulfills its continuing obligation to obtain sufficient data upon which to base the final biological opinion on the entire action;
- (4) The incremental step does not violate section 7(d) of the Act concerning irreversible or irretrievable commitment of resources; and
- (5) There is a reasonable likelihood that the entire action will not violate section 7(a)(2) of the Act.
- (l) Expedited consultations. Expedited consultation is an optional formal consultation process that a Federal agency and the Service may enter into upon mutual agreement. To determine whether an action or a class of actions is appropriate for this type of consultation, the Federal agency and the Service shall consider the nature, size, and scope of the action or its anticipated effects on listed species or critical habitat and other relevant factors. Conservation actions whose primary purpose is to have beneficial effects on listed species will likely be considered appropriate for expedited consultation.
 - (1) Expedited timelines. Upon agreement to use this expedited consultation process, the Federal agency and the Service shall establish the expedited timelines for the completion of this consultation process.

- (2) Federal agency responsibilities. To request initiation of expedited consultation, the Federal agency shall provide all the information required to initiate consultation under paragraph (c) of this section. To maximize efficiency and ensure that it develops the appropriate level of information, the Federal agency is encouraged to develop its initiation package in coordination with the Service.
- (3) Service responsibilities. In addition to the Service's responsibilities under the provisions of this section, the Service will:
- (i) Provide relevant species information to the Federal agency and guidance to assist the Federal agency in completing its effects analysis in the initiation package; and
- (ii) Conclude the consultation and issue a biological opinion within the agreed-upon timeframes.
- (m) Termination of consultation.
 - (1) Formal consultation is terminated with the issuance of the biological opinion.
 - (2) If during any stage of consultation a Federal agency determines that its proposed action is not likely to occur, the consultation may be terminated by written notice to the Service.

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(3) If during any stage of consultation a Federal agency determines, with the concurrence of the Director, that its proposed action is not likely to adversely affect any listed species or critical habitat, the consultation is terminated.