



## **CAPE MAY COUNTY COMMENTS ON THE PROPOSED INCIDENTAL HARASSMENT TAKE AUTHORIZATION FOR OCEAN WIND 2**

**AGENCY/DOCKET: RTID 0648-XC889**

Jolie Harrison  
Chief, Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
[ITP.Esch@noaa.gov](mailto:ITP.Esch@noaa.gov)

Dear Ms. Harrison,

Our firm represents Cape May County and submits these comments on its behalf regarding the proposed Incidental Harassment Authorization (IHA) requested by Orsted for site-characterizations using High Resolution Geophysical (HRG) surveys of the seafloor for the Ocean Wind 2 offshore wind project. Cape May County has experienced increased rates of marine mammal fatalities on its shoreline over the past 7 months and urges the National Marine Fisheries Service to reject the proposed IHA until conclusive evidence determines that HRG surveying is not a contributing factor in the recent spate of whale and dolphin deaths.

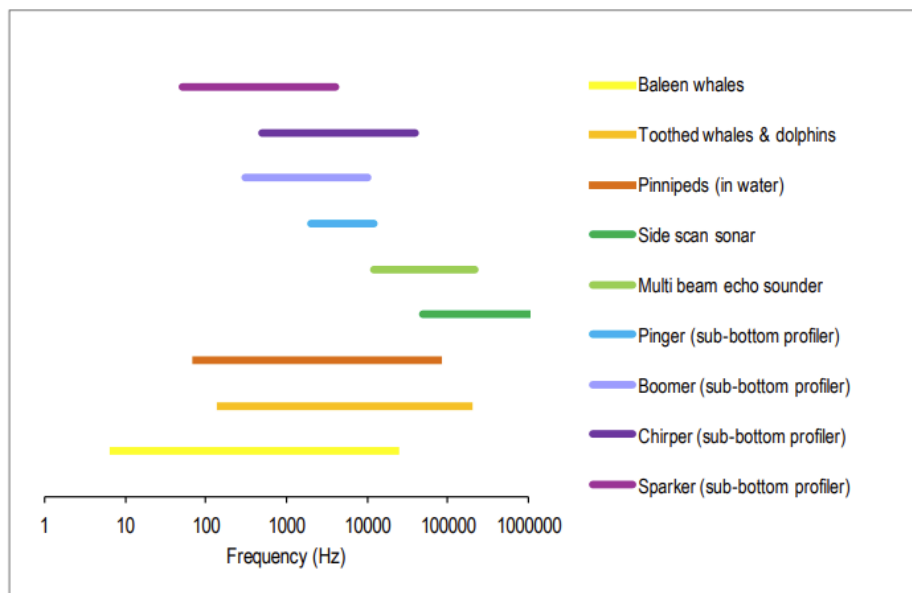
As your office is already well aware, there is an ongoing Unusual Mortality Event (UME) that is currently impacting both the North Atlantic Right Whale and the Atlantic Humpback Whale. While the UME's began in 2017, a sudden increase in Humpback Whale fatalities has been observed off the coasts of New York and New Jersey since widespread acoustic surveying of the seafloor increased in 2022 in connection with proposed offshore wind projects. Residents within Cape May County, many of whom have spent their entire lives there, have never witnessed this level of marine mammal fatalities on their shorelines. Federal and state scientists have quickly dismissed any connection between marine mammal fatalities and HRG surveying without adequate investigations into the issue and have provided no conclusive evidence ruling out that HRG surveying may be a contributing factor in recent marine mammal fatalities.

Cape May County is on the receiving end of these whale and dolphin fatalities and County residents are demanding answers. Communities within Cape May County, as well as communities across New Jersey, New York, and New England, continue to face historic rates of marine mammal strandings and fatalities along their shorelines, which could be connected to marine acoustic surveying for offshore wind. Since December 2022, more than 56 whales have been found stranded on beaches or floating in waters across the

Mid-Atlantic, in addition to at least 43 dolphins in New Jersey alone.<sup>1,2</sup> Waters off Cape May County have only had one new variable introduced over the last year – the ongoing HRG surveying related to offshore wind development. At any given time, there have been several vessels operating simultaneously off the New Jersey coast, creating widespread noise that marine mammals may evade to protect their hearing.

While some marine scientists have pointed towards warming ocean temperatures and the shoreward movement of Atlantic Menhaden as possible reasons for the increase in marine mammal vessel strikes, the evidence is inconclusive. Since BOEM and NOAA have refused to further investigate any possible connection between offshore wind development and marine mammal fatalities, Members of Congress have taken action by passing legislation which tasked the General Accountability Office with investigating the environmental impacts of offshore wind projects and any associated impacts on marine mammals. Support for the study was echoed by environmental groups, marine scientists, fishermen, and concerned residents.

The activities being performed by marine acoustic surveyors are known to have behavioral impacts on marine mammals, and while federal government scientists claim no connection exists between recent fatalities and acoustic surveying, the same scientists have no conclusive evidence that rules out the connection between acoustic surveying and marine mammal fatalities. In fact, according to Gardline, an established marine surveyor, these activities use equipment that operates with volumes and frequencies directly within the communicative frequencies of a variety of whales and other low-frequency cetaceans, such as Humpback Whales and North Atlantic Right Whales, which use New Jersey waters for feeding, breeding, and migration (see Figure 1, below).



**Figure 1:** Auditory Frequencies Used By Marine Mammals and The Main Frequency Range of Analogue Equipment

<sup>1</sup> NJ Dolphin & Porpoise Strandings By Species & Year Since 2022. Marine Mammal Stranding Center. <https://Mmsc.Org/Cetaceans-2002-2023>

<sup>2</sup> The National Oceanic and Atmospheric Administration reported on July 12<sup>th</sup>, that 56 dead whales have been found since December. *Lawsuits Could Delay the Start of New Jersey's First Offshore Wind Power Project*, Associated Press. <https://apnews.com/article/offshore-wind-lawsuits-new-jersey-orsted-c0f5890e41a3b58772f7e1d0e3e5a5f7>

In addition, according to data contained within Incidental Harassment Authorizations issued by NOAA, the decibel volumes of such equipment can exceed the thresholds for temporary and even permanent hearing loss, depending on proximity to the sound source.<sup>3,4</sup> Continuous widespread noise can result in acoustic masking of whales' communication and navigation, causing behavioral disturbances that may limit foraging, migration, and mating, or result in other stress-related collisions with large vessels.

NOAA's 2018 revision to its *Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0, Updated 2023)* specifies decibel levels ranging from 153 dB to 199 dB at which temporary hearing loss is induced for various hearing groups among marine mammals, with low-frequency marine mammals experiencing temporary hearing loss at 179 dB (Table 1.0).<sup>5</sup> It is important to note that any sound above 160 dB is categorized as disturbance-level by the National Marine Fisheries Service and that behavioral responses are likely to occur at decibel levels below the TTS threshold and even lower than the disturbance-level threshold (Table 2.0).<sup>6</sup> The sound levels produced by the equipment proposed for these surveys (Table 3.0) clearly show that the sound source levels of the equipment used exceeds the disturbance-level threshold of 160 dB as well as the maximum thresholds for TTS onset. The Sound Pressure Level (SPL) for all technologies ranges from a low of 176 dB to a maximum of 205 dB, exceeding the Level A harassment threshold of 199 dB for low-frequency cetaceans.<sup>7</sup>

**Table 1: TTS Onset Threshold for Non-Impulsive Sounds (NOAA, 2018)**

Hearing Group	<i>K</i> (dB)	<i>C</i> (dB)	Weighted TTS onset acoustic threshold (SEL <sub>cum</sub> )
Low-frequency (LF) cetaceans	179	0.13	179 dB
Mid-frequency (MF) cetaceans	177	1.20	178 dB
High-frequency (HF) cetaceans	152	1.36	153 dB
Phocid pinnipeds (underwater)	180	0.75	181 dB
Otariid pinnipeds (underwater)	198	0.64	199 dB

Furthermore, NOAA has concluded as recently as 2022 that the PBR level (Potential Biological Removal), the highest number of whales that can be removed from a stock – not including natural deaths – while allowing that stock to reach or maintain its optimum sustainable population, is less than 1 (0.7) for North Atlantic Right Whales.<sup>8</sup> Despite estimates of only 338 remaining North Atlantic Right Whales, BOEM and

<sup>3</sup> Protected Species Surveyor Report, Alpine Ocean Seismic Survey Inc. <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/App-B-Shearwater-PSO-Report.pdf>

<sup>4</sup> Atlantic Shores Request for an Incidental Harassment Authorization to Allow the Non-Lethal Take of Marine Mammals Incidental to Site Characterization Surveys of the Atlantic Shores Lease Area (OCS-A 0499) [https://media.fisheries.noaa.gov/2022-01/AtlanticShoresHRG\\_2022\\_App\\_OPR1.pdf](https://media.fisheries.noaa.gov/2022-01/AtlanticShoresHRG_2022_App_OPR1.pdf)

<sup>5</sup> Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing. NOAA, 2018. (Updated 2023) <https://www.fisheries.noaa.gov/resource/document/technical-guidance-assessing-effects-anthropogenic-sound-marine-mammal-hearing>

<sup>6</sup> TTS refers to the Temporary Threshold Shift, which is a change in hearing threshold that recovers to pre-exposure levels (baseline) over time. Ryan AF, Kujawa SG, Hammill T, Le Prell C, Kil J. Temporary and Permanent Noise-induced Threshold Shifts: A Review of Basic and Clinical Observations. *Otol Neurotol*. 2016 Sep;37(8):e271-5.

<sup>7</sup> Ocean Wind II, LLC, Application for Incidental Harassment Authorization for the Non-Lethal Taking of Marine Mammals during Site Characterization Surveys off New Jersey, Lease OCS-A 0532, April 2023. <https://www.fisheries.noaa.gov/s3/2023-06/OWII-2023IHA-application-508-OPR1.pdf>

<sup>8</sup> North Atlantic Right Whale (*Eubalaena glacialis*) 5-Year Review: Summary and Evaluation (NOAA) [https://media.fisheries.noaa.gov/2022-12/Sign2\\_NARW20225YearReview\\_508-GARFO.pdf](https://media.fisheries.noaa.gov/2022-12/Sign2_NARW20225YearReview_508-GARFO.pdf)

NOAA have continued to issue an alarming number of offshore wind related Incidental Harassment Authorizations that far exceeds the PBR.

Undoubtedly, prolonged harassment and disturbances upset the typical behavior patterns of whales and can severely impact energetic foraging and mating, resulting in grave consequences for the species as described by Sean Hayes, Chief of Protected Species at NOAA’s Northeast Fisheries Science Center, in a May 13, 2022, letter. The letter warned about critical impacts to the North Atlantic Right Whale from offshore wind installations, such as increased noise, vessel traffic, habitat modifications, water withdrawals associated with certain substations and resultant impingement/entrainment of zooplankton, changes in fishing effort and related potential increased entanglement risk, and oceanographic changes that may disrupt the distribution, abundance, and availability of typical right whale food.<sup>9,10</sup>

**Table 2:** Summary of National Marine Fisheries Service acoustic criteria for Level A and Level B Acoustic exposure from impulsive and non-impulsive, intermittent sources (NMFS, 2023)

Hearing Group	Source Type				
	Non-Impulsive		Impulsive		
	Level B <sup>1</sup>	Level A <sup>2</sup>	Level B <sup>1</sup>	Level A <sup>3</sup>	Level A <sup>2</sup>
Low-frequency Cetacean	160	199	160	219	183
Mid-frequency Cetacean		198		230	185
High-frequency Cetacean		173		202	155
Phocid Pinniped (in water)		201		218	185

μPa = micropascal; dB = decibel; re = referenced to; PK = zero-to-peak sound pressure level; SEL<sub>24h</sub> = sound exposure level over 24-hours; SPL = root-mean-square sound pressure level.

<sup>1</sup>Units expressed as SPL in dB re 1 μPa (unweighted). Level B criteria are the same for all intermittent sources, both non-impulsive and impulsive, which are considered in this Application.

<sup>2</sup>Units expressed as SEL<sub>24h</sub> in dB re 1 μPa<sup>2</sup> s (weighted).

<sup>3</sup>Units expressed as PK in dB re 1 μPa.

Residents who have lived along the Jersey Shore for generations have never experienced such an alarming number of marine mammal fatalities and have expressed extraordinary concerns that offshore wind surveys are possibly to blame. Those concerns have quickly been brushed aside by BOEM and other federal agencies without due consideration for the concerns that even experts in the marine surveying industry have expressed. The County stands in support of the concerns raised by its constituents as well as more than 51 communities across New Jersey, Maryland, and Delaware, which have also called for moratoriums on offshore wind surveying until federal, state, and independent scientists have conclusively determined that offshore wind surveys are not a contributing factor in recent marine mammal fatalities.

<sup>9</sup> Dorrell R.M., Lloyd C.J., Lincoln B.J., Rippeth T.P., Taylor J.R., Caulfield C.C.P., Sharples J, Polton JA, Scannell BD, Greaves DM, Hall RA and Simpson JH (2022) Anthropogenic Mixing in Seasonally Stratified Shelf Seas by Offshore Wind Farm Infrastructure. *Frontiers in Marine Science*. 9:830927. doi: 10.3389/fmars.2022.830927

<sup>10</sup> NOAA Scientists Propose More Protection for Right Whales in Offshore Wind Area. <https://newbedfordlight.org/noaa-scientists-propose-more-protection-for-right-whales-in-offshore-wind-area/>

If marine surveying is harmless to marine mammals (as BOEM and NOAA claim), why has the National Marine Fisheries Service issued so many Incidental Harassment Authorizations to wind developers and why are the numbers of disturbed mammals so high? The total number of authorizations has been summarized in Tables 4 and 5, below. While the County understands that the technologies being employed for the purposes of HRG surveying are not intense enough on their own to cause mortality, the County is concerned that widespread disturbance-level noise impacts could induce stress-response behaviors in marine mammals, causing them to venture into areas that may increase the likelihood of vessel strikes. Without adequate evidence to dismiss the County's concerns, the County objects to the proposed IHA and again urges NMFS to reject the application.

**Table 3:** List of Proposed HRG Survey Equipment and Operating Specifications

Equipment	Source Type	WFA in User Spreadsheets (kHz) <sup>2</sup>	Reference for SL	Operating Frequency (kHz)	SL (SPL dB re 1 $\mu$ Pa m)	SL (SEL dB re 1 $\mu$ Pa <sup>2</sup> m <sup>2</sup> s)	SL (PK dB re 1 $\mu$ Pa m)	Pulse Duration (width) (millisecond)	Repetition Rate (Hz)	Beamwidth (degrees)	Deployment Method
<b>Shallow Sub-bottom Profilers (CHIRPS)</b>											
ET 216 (2000DS or 3200 top unit)	Non-impulsive, mobile, intermittent	N/A <sup>3</sup>	MAN	2–16 2–8	195	178	-	20	6	24	PM/T/EM
ET 424 3200-XS	Non-impulsive, mobile, intermittent	N/A <sup>3</sup>	CF	4–24	176	152	-	3.4	2	71	PM/T/EM
ET 512i	Non-impulsive, mobile, intermittent	N/A <sup>3</sup>	CF	0.7–12	179	158	-	9	8	80	PM/T/EM
GeoPulse 5430A	Non-impulsive, mobile, intermittent	N/A <sup>3</sup>	MAN	2–17	196	183	-	50	10	55	PM/T/EM
Teledyne Benthos Chirp III - TTV 170	Non-impulsive, mobile, intermittent	N/A <sup>3</sup>	MAN	2–7	197	185	-	60	15	100	PM/T/EM
<b>Impulsive, Medium Sub-bottom Profilers (Sparkers &amp; Boomers)</b>											
AA, Dura-spark UHD Sparker (400 tips, 500 J) <sup>4</sup>	Impulsive, mobile	1	CF	0.3–1.2	203	174	211	1.1	4	Omni	T
AA, Dura-spark UHD Sparker Model 400 x 400 <sup>4</sup>	Impulsive, mobile	1	CF	0.3–1.2	203	174	211	1.1	4	Omni	T
GeoMarine, Dual 400 Sparker,	Impulsive, mobile	1.5	CF	0.4–5	203	174	211	1.1	2	Omni	T
GeoMarine Sparker, Model Geo-Source 200-400 <sup>4,5</sup>	Impulsive, mobile	1	CF	0.3–1.2	203	174	211	1.1	4	Omni	T
GeoMarine Sparker, Model Geo-Source 200 Lightweight <sup>4,5</sup>	Impulsive, mobile	1	CF	0.3–1.2	203	174	211	1.1	4	Omni	T
AA, triple plate S-Boom(700–1,000 J) <sup>6</sup>	Impulsive, mobile	3.4	CF	0.1–5	205	172	211	0.6	4	80	T

$\mu$ Pa = micropascal; AA = Applied Acoustics; CF = Crocker and Fratantonio (2016); CHIRP = compressed high-intensity radiated pulses; dB = decibel; EM = equipment mounted; ET = edgetech; J = joule; Omni = omnidirectional source; re = referenced to; PK = zero-to-peak sound pressure level; PM = pole mounted; SBI = sub-bottom imager; SL = source level; SPL = root-mean-square sound pressure level; T = towed; TB = Teledyne benthos; UHD = ultra-high definition; WFA = weighting factor adjustment.

<sup>1</sup>Operational parameters listed here differ from those listed in the Bureau of Ocean Energy Management Biological Assessment published in February 2021 (Baker and Howson, 2021).

<sup>2</sup>WFAs were selected in the User Spreadsheet were based on estimated hearing sensitivities of marine mammals and the operational frequency of the source.

<sup>3</sup>All CHIRP equipment have operational beamwidths  $\leq 180^\circ$  and sweep through a range of frequencies per pulse, so ranges to Level A thresholds were therefore calculated using MATLAB code provided by the National Marine Fisheries Service Office of Protected Resources (NMFS, 2021a).

<sup>4</sup>The Dura-spark measurements and specifications provided in Crocker and Fratantonio (2016) were used for all sparker systems proposed for the survey. The data provided in Crocker and Fratantonio (2016) represent the most applicable data for similar sparker systems with comparable operating methods and settings when manufacturer or other reliable measurements are not available.

<sup>5</sup>The AA Dura-spark (500 J, 400tips) was used as a proxy source.

<sup>6</sup>Crocker and Fratantonio (2016) provide S-Boom measurements using two different power sources (CSP-D700 and CSP-N). The CSP-D700 power source was used in the 700 J measurements but not in the 1,000 J measurements. The CSP-N source was measured for both 700 J and 1,000 J operations but resulted in a lower SL; therefore, the single maximum SL value was used for both operational

**Table 4:** Data compiled by Clean Ocean Action from all Incidental Harassment Authorizations issued by NOAA (June 2023)

<b>Take Category</b>	<b>NY/NJ Bight</b>	<b>Atlantic Coast</b>
Level A Proposed Takes	1,238	1,306
Level B Proposed Takes	437,811	524,760
Level A Authorized Takes	122	122
Level B Authorized Takes	96,362	115,611
Level B Expired Takes	153,528	173,104
<b>Totals</b>	<b>689,061</b>	<b>814,903</b>

**Table 5:** Takes by Species, compiled from NOAA IHA data.

MARINE MAMMAL SPECIES	TOTAL STOCK SIZE OF SPECIES	TOTAL OF ALL INCIDENTAL TAKES	TOTAL % OF STOCK SIZE
<b>WHALES – Mysticetes (Baleen)</b>			
Fin Whale, Endangered	6,802	2,477	36%
North Atlantic Right Whale, Endangered	338	710	210%
Sei Whale, Endangered	6,292	341	5%
Blue Whale, Endangered	412	29	7%
Sperm Whale, Endangered	4,349	426	10%
<b>TOTAL Endangered Whales</b>	<b>18,193</b>	<b>3,983</b>	<b>22%</b>
<b>OTHER WHALES</b>			
Humpback Whale	1,396	1,981	142%
Minke Whale	21,968	4,787	22%
Dwarf Sperm Whale	4,548	8	0%
Pygmy Sperm Whale	7,750	10	0%
Cuvier's Beaked Whale	Unknown	14	-%
Bainville's Beaked Whale	5,500	8	0%
Gervais' Beaked Whale	Unknown	8	-%
Sowerby's Beaked Whale	Unknown	8	-%
True's Beaked Whale	Unknown	6	-%
Northern Bottlenose Whale	Unknown	12	-%
Mesoplodont Whale	Unknown	18	-%
<b>TOTAL WHALES</b>	<b>77,548</b>	<b>10,843</b>	<b>14%</b>
<b>DOLPHINS – Odontocetes</b>			
Atlantic Spotted Dolphin	39,921	31,105	78%
Atlantic White-Sided Dolphin	93,233	15,974	17%
Bottlenose, Offshore Dolphin	62,851	29,415	47%
Bottlenose, Coastal Dolphin	6,639	10,468	158%
Bottlenose, Offshore & Coastal Dolphin	69,490	50,186	72%
Clymene Dolphin	4,237	344	8%
Short-Beaked Common Dolphin	172,974	207,759	120%
Pygmy Killer Whale	Unknown	10	-%
Killer Whale	Unknown	10	-%
False Killer Whale	1,791	33	2%
Fraser's Dolphin	Unknown	384	-%
Melon-Headed or Little Killer Whale	Unknown	228	-%
Pantropical Spotted Dolphin	6,593	260	4%
Long-finned Pilot Whales	39,215	2,816	7%
Short-finned Pilot Whales	1,981	1,916	97%
Risso's Dolphin	35,215	1,604	5%
Rough-Toothed Dolphin	4,853	248	5%
Striped Dolphin	67,036	128	0%
White Beaked Dolphin	536,016	150	0%
<b>TOTAL DOLPHINS</b>	<b>1,142,045</b>	<b>353,038</b>	<b>31%</b>
<b>PORPOISES</b>			
Harbor Porpoise	95,543	21,491	22%
<b>SEALS – Pinnipeds</b>			
Gray Seal	27,300	31,163	114%
Harbor Seal	61,336	52,460	86%
Harp Seal	Unknown	10,983	-%
Hooded Seal	593,500	3	0%
<b>TOTAL SEALS</b>	<b>682,136</b>	<b>94,609</b>	<b>14%</b>
<b>TOTAL COUNT OF ALL SPECIES</b>	<b>1,997,272</b>	<b>479,961</b>	<b>24%</b>
<b>TOTAL ENDANGERED SPECIES</b>	<b>18,193</b>	<b>3,983</b>	<b>22%</b>



CC:

**Debra Haaland**

Secretary  
U.S. Department of the Interior  
1849 C Street NW  
Washington, DC 20240  
Via email: [Debra.Haaland@doi.gov](mailto:Debra.Haaland@doi.gov)

**Martha Williams**

Director, U.S. Fish and Wildlife Service  
Department of the Interior  
1849 C St. NW, MIB Rm. 3148  
Washington DC 20240  
Via email: [Fws\\_director@fws.gov](mailto:Fws_director@fws.gov)  
[Martha\\_Williams@fws.gov](mailto:Martha_Williams@fws.gov)

**Eric Schradling**

Field Office Supervisor  
U.S. Fish and Wildlife Service  
927 North Main Street (Bldg. D.)  
Pleasantville, New Jersey 08232  
Via email: [eric\\_schradling@fws.gov](mailto:eric_schradling@fws.gov)

**Ms. Janet Coit**

Assistant Administrator, NOAA Fisheries  
1315 East-West Highway  
Silver Spring, MD 20910  
Via email: [janet.coit@noaa.gov](mailto:janet.coit@noaa.gov)

**Benjamin Friedman**

Deputy Under Secretary for Operations  
National Oceanic and Atmospheric Administration  
1401 Constitution Avenue NW, Room 5128  
Washington, DC 20230  
Via email: [benjamin.friedman@noaa.gov](mailto:benjamin.friedman@noaa.gov)

**Admiral Karl Schultz**

Commandant  
U.S. Coast Guard  
2703 Martin Luther King Jr., S.E.  
Washington, DC 20593

**Todd Schaible**

USACE, Philadelphia District Regulatory Branch  
The Wanamaker Building 100 Penn Square East  
Philadelphia, PA 19107  
Via email: [Todd.A.Schaible@usace.army.mil](mailto:Todd.A.Schaible@usace.army.mil)  
[napregulatory@usace.army.mil](mailto:napregulatory@usace.army.mil)

**Congressman Jefferson Van Drew**

Rayburn House Office Building, 2427  
Washington, D.C., DC 20515

**Senator Cory Booker**

717 Hart Senate Office Building  
Washington, DC 20510

**Senator Robert Menendez**

528 Hart Senate Office Bldg.  
Washington, DC 20510



*Ocean Advocacy  
Since 1984*

## Clean Ocean Action

---

*Headquarters:*  
49 Avenel Blvd  
Long Branch, NJ 07740  
Telephone (732) 872-0111  
Fax (732) 872-8041  
info@CleanOceanAction.org  
CleanOceanAction.org

*Field Office:*  
18 Hartshorne Dr, Suite 2  
Sandy Hook  
Highlands, NJ, 07732-0505

July 13, 2023

Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

**RE: Incidental Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Offshore of New Jersey by Orsted for Ocean Wind II, Agency/Docket Number: RTID 0648-XC889**

Dear Chief Harrison:

Clean Ocean Action (“COA”) is a regional, broad-based coalition of conservation, environmental, fishing, boating, diving, student, surfing, women’s, business, civic, and community groups with a mission to improve the water quality of the marine waters off the New Jersey/New York coast. COA submits the following comments to the National Oceanic and Atmospheric Administration’s (“NOAA”) National Marine Fisheries Service (“NMFS”) in opposition to the request for an Incidental Harassment Authorization (“IHA”) from Orsted (henceforth, the “Applicant”) for marine site characterization surveys for the development of **Ocean Wind II**, an offshore wind (“OSW”) energy power plant off the coast of New Jersey and New York.<sup>1</sup>

According to the Public Notice, “Ocean Wind II proposes to conduct HRG marine site characterization surveys in the BOEM Lease Area OCS-A 0532 and along potential submarine ECRs to landfall locations in New Jersey.”<sup>2</sup> The IHA request, if approved, would authorize the “takes” of marine mammals over the course of one year, with a “possible one-year Renewal IHA.”<sup>3</sup> According to the Public Notice, “Ocean Wind II’s request is for take of 16 species (comprising 17 stocks) of marine mammals, including 14 cetacean and two pinniped (seal) species, by Level B harassment only.”<sup>4</sup> Further, the Public Notice states, “Underwater sound resulting from Ocean Wind II’s activities has the potential to result in incidental take of marine mammals in the form of Level B harassment.”<sup>5</sup>

---

<sup>1</sup> Federal Register, “[Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Offshore of New Jersey](#),” Vol. 88, No. 113, Tuesday, June 13, 2023/Notices, page 38491.

<sup>2</sup> See *id.*

<sup>3</sup> See *id.*

<sup>4</sup> See *id.*

<sup>5</sup> See *id.*

From the outset, it is shocking that the NMFS is moving aggressively forward reviewing and issuing IHAs, as well as Incidental Take Regulations (“ITR”) and associated Letter of Authorizations (“LOA”), with little to no baseline assessment of marine mammal studies in the region. Indeed, the New Jersey Department of Environmental Protection (NJDEP) recently authorized a marine mammal monitoring plan for whales. The absence of baseline data will result in the absence of good science, and bad policy decisions. Indeed, NMFS agency officials are also frustrated: “ ‘We’re building this ship as we’re sailing it,’ NMFS scientist Andrew Lipsky said last October at a conference on wind power. ‘When we don’t think through the science, we often get ourselves in trouble.’ ”<sup>6</sup>

This current IHA request, if approved, would allow the Applicants to “take” or “harass” **2,856 marine mammals** by “Level B Harassment” during the pre-construction activities for an offshore wind power plant. According to the Federal Register notice for the IHA request, the marine mammals included in the proposed take amounts are of **16** different species and include the following number of endangered species<sup>7</sup>:

- North Atlantic right whale: 2
- Fin whale: 4
- Sei whale: 1
- Sperm whale: 3

Per the Marine Mammal Protection Act (“MMPA”), other federally protected whales in the Applicant’s proposed take amounts by Level B harassment include:

- Humpback whales: 4
- Minke whales: 8
- Common bottlenose dolphins (offshore and coastal): 2,221
- Atlantic white-sided dolphins: 50
- Common dolphins: 400
- Harbor porpoise: 72
- Gray and Harbor seals: 26, and
- other protected dolphins and porpoise species.<sup>8</sup>

It is curious that the total takes in this current IHA application are significantly less than authorizations previously issued for marine site characterization activities related to offshore wind energy activities. While lower, it is important to note this application to “take” marine mammals is in addition to the Applicant’s previous take authorization for preconstruction work issued in 2022, and numerous preconstruction and now construction IHAs for the Applicants’ nearby Ocean Wind 1 project. COA provided comments on these previous IHA requests by the Applicant. In addition, “take” authorizations are forthcoming for the Applicant’s continued preconstruction activities for Ocean Wind 1, as well as for construction, operation and

---

<sup>6</sup> Sennott, Will and Anastasia Lennon. “Blown Away: Fishermen Endangered by Offshore Wind’s Political Power.” The New Bedford Light, April 18, 2023, <https://www.propublica.org/article/fishermen-endangered-offshore-wind-political-power>.

<sup>7</sup> Federal Register, “[Takes of Marine Mammals Incidental to Specified Activities: Taking Marine Mammals Incidental to Marine Site Characterization Surveys Offshore of New Jersey](#),” Vol. 88, No. 113, Tuesday, June 13, 2023/Notices, page 38491.

<sup>8</sup> See *id.*

maintenance, and decommissioning that should be considered when determining impacts to marine mammal populations.

In addition, at the time of these submitted comments, there are **15 current “active” take authorizations (IHAs and ITRs)** to harass marine mammals for preconstruction and construction activities for offshore wind power plants on the East Coast.<sup>9</sup> Collectively, these take authorizations are already allowing the harassment of hundreds of thousands of marine mammals. In addition, there are **14 “in process”** authorizations to harass hundreds of thousands of marine mammals on the East Coast for preconstruction and construction activities, many of which have open public comment periods simultaneously.

Clean Ocean Action reviewed the list of active, in process, and expired IHAs for offshore wind projects along the East Coast of the United States. COA calculated that between April 25, 2014, and June 12, 2023, the total number of marine mammals authorized to be harassed just for offshore wind related preconstruction and construction activities in the NY/NJ Bight is a staggering **689,061**.

Indeed, it appears there are no limits for the allowance of incidental take impacts from the current application as well as for the full scope of pending OSW proposals as provided by the NMFS:

*By 2030 the Northeast large marine ecosystem will be occupied by over 2.4 million acres of leases, 3,400 turbines, and 10,000 miles of submarine cables; and an additional 5.7 million acres is also under consideration for further development.*<sup>10</sup>

Each project will propose to harm marine mammals. It is impossible for marine mammals to adapt to such massive industrial scope and scale of OSW development with each project at minimum causing the excessive impacts described by just one Applicant’s project. The activities described in the Applicant’s IHA request have been documented to result in species harassment, hence the need for incidental take authorizations.

The mission of the NOAA NMFS Office of Protected Species is “responsible for the protection, conservation, and recovery of more than 160 endangered and threatened marine and anadromous species under the Endangered Species Act. The goal of the ESA is to conserve these species and the ecosystems they depend on.”<sup>11</sup> The government is obligated to provide assessments of the potential and real marine ecosystem impacts, and then stipulate policies and regulations to avoid and reduce negative impacts and ensure appropriate and meaningful mitigation of the unavoidable impacts. This also requires, at minimum, a fair, comprehensive, and independently peer-reviewed pilot project for this unproven, large-scale industry in US waters. Indeed, this also requires sound science supported by robust baseline ecological assessments and independent and

---

<sup>9</sup> See *id.*

<sup>10</sup> Andy Lipsky, NOAA Fisheries. “Fisheries, Wildlife, and Ecosystem Science in a New Era of Offshore Wind Energy Development.” NOAA Ecosystem Based Management and Ecosystem Based-Fisheries Management Seminar Series, March 9, 2022, <https://www.youtube.com/watch?v=Dh7yBEDHzL8>.

<sup>11</sup> National Oceanic & Atmospheric Administration, “About Us: Office of Protected Resources,” as seen on 12/9/2022, <https://www.fisheries.noaa.gov/about/office-protected-resources>.

peer-reviewed studies which are currently planned, only just begun, or underway and incomplete.

Instead, the government is fast-tracking projects, including the Applicant's project. There are numerous Memorandums of Understanding and Memorandums of Agreement between federal agencies to streamline approval of OSW projects. In fact, in early May 2023, the Biden Administration announced a new Memorandum of Understanding.<sup>12</sup> Further, there are several OSW projects in the NY/NJ region designated federal as "Fast-41 projects." However, fast-tracking projects is not protective of marine species. The government's fast-tracking of OSW projects is inconsistent with good governance of public resources, the precautionary principle, and most importantly, laws including the Endangered Species Act ("ESA"). From the outset:

*Section 7(a)(2) of the ESA requires BOEM, in consultation with NOAA Fisheries, to ensure that any action the agencies authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered species or result in the destruction or adverse modification of designated critical habitat; this coordination is accomplished through ESA section 7 consultations. BOEM and NOAA Fisheries are required by the ESA to use the best scientific and commercial data available when carrying out these consultations.*<sup>13</sup>

It is important to note here that there are **no** permitting rules for marine site characterization surveying activities. COA finds it shocking and unconscionable that there are no permitting requirements for geological and geophysical surveys under the Bureau of Ocean Energy Management ("BOEM"). The recent BOEM Modernization Rule proposal states:

*Although BOEM requires a lessee to submit the results of certain surveys to BOEM in order to obtain approval of its COP, those regulations do not require BOEM's approval of a permit for such surveys. Instead, BOEM has provided guidance on conducting such surveys and also includes terms and conditions in renewable energy leases that require lessees to submit survey plans to BOEM for review in advance of their survey activities. BOEM's review of the plans, while not an approval process, does provide BOEM an opportunity to communicate with lessees to ensure the lessees' survey results will meet BOEM's information needs and to ensure certain environmental conditions are met in conducting the surveys.*<sup>14</sup>

---

<sup>12</sup> The White House, "FACT SHEET: Biden-Harris Administration Outlines Priorities for Building America's Energy Infrastructure Faster, Safer, and Cleaner," May 10, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/10/fact-sheet-biden-harris-administration-outlines-priorities-for-building-america-energy-infrastructure-faster-safer-and-cleaner/>

<sup>13</sup> NOAA Fisheries, "Section 7: Types of Endangered Species Act Consultations in the Greater Atlantic Region," as seen 4/30/2023, <https://www.fisheries.noaa.gov/insight/section-7-types-endangered-species-act-consultations-greater-atlantic-region>.

<sup>14</sup> Federal Register, "Renewable Energy Modernization Rule," Bureau of Ocean Energy Management, Publication Date: 1/30/2023, <https://www.federalregister.gov/documents/2023/01/30/2023-00668/renewable-energy-modernization-rule>.

Given this, it raises more questions about how it was possible that BOEM asserts without question that there is absolutely “no evidence” that offshore wind activities have any connection to the unprecedented number of dead whales that continued to wash-up on beaches in the NY/NJ region since December 2022. It is now clear there are no regulations; there are no “rules of the road” regarding survey work. Without such regulations, how can BOEM possibly make such a claim? Is the only requirement for survey vessels currently under the Marine Mammal Protection Act (“MMPA”) requiring IHA authorizations, which are limited in scope? In the Proposed Modernization Rule, BOEM admits not having the regulatory authority to govern surveys: “BOEM’s existing renewable energy regulations do not expressly govern survey activities.”<sup>15</sup>

Further, regarding impacts to marine life from offshore wind development, NOAA Fisheries assumes the success of mitigation measures for impacts from offshore wind development. Before mitigation is considered, avoidance and minimization are required. However, without baseline studies and a pilot project to determine impacts, how can mitigation measures be established? This massive cumulative impact of multiple projects by a nascent US industry has not been assessed, and as described above has no precedence or permitting system. What is this mitigation strategy based on? What if mitigation measures fail? Since there is no transparent, consistent publicly available real-time assessment and reporting activities, how will NMFS even know? How is NMFS or BOEM determining if mitigation measures are enough to prevent harassment to marine mammals during the survey work? What are the ecological guardrails? How and when would it be determined that additional harassment is occurring, and work must stop?

In sum, COA requests that NMFS deny the Applicant’s IHA request because:

1. there are no permitting requirements for geological and geophysical surveys under the Bureau of Ocean Energy Management (“BOEM”).
2. it is an incomplete evaluation due to the lack of new information and new protection strategies under development by federal agencies, particularly for the critically endangered North Atlantic right whale (“NARW”).
3. it would allow thousands of Level B takes of endangered, threatened, and/or protected marine mammal species, including the NARW, which will have significant and more than “negligible” impacts on a species on the precipice of extinction, especially in light of updated information indicating further population decline.
4. it will unacceptably add impacts to the already detrimental concurrent and cumulative impacts of the numerous take authorizations and requests from the Applicant’s previous activities and projects in the region, as well as those requests and authorizations for other offshore wind industry companies’ previous, current, and forthcoming take authorizations for preconstruction, construction, operation, and decommissioning of OSW facilities,
5. it raises other issues of importance, including lack of fairness, transparency, and accountability; and
6. it fails to address the cumulative impacts and effects of previous and concurrent preconstruction surveys and construction activities in the region.

---

<sup>15</sup> See *id.*

7. an independent assessment is needed to determine if the unprecedented geotechnical and geophysical activities may be linked to the spike of whale and dolphin strandings in the region of the offshore wind project.

It is unacceptable and harmful to marine resources, to be moving forward with incidental take authorizations at the current scope and scale of OSW energy development without sound science, transparency, due diligence, and meaningful public engagement. Clean Ocean Action urges NMFS to reject the Applicant's IHA request for the construction of an offshore wind power plant for the reasons outlined below in these comments.

***I. Deny and Rescind the IHA request, as well as other “in process” take authorization requests, due to the: A.) Five-Year Strategy to protect NARW under development, B.) Lack of basic research about impacts to large whales, C.) Unprecedented number of whale deaths occurring in a short period of time along the NJ/NY coast starting in December 2022.***

***A. Five-Year Strategy to Protect NARW is Under Development***

The Bureau of Ocean Energy Management (“BOEM”) and NOAA Fisheries’ “Draft North Atlantic Right Whale and Offshore Wind Strategy” (hereafter “Draft Strategy”) was proposed for public review but has not yet been finalized. This five-year protection plan for the North Atlantic right whale (“NARW”), while flawed and incomplete, is currently under development and stipulates the dire status of the NARW and need for additional protection. To ensure the best chance of survival, incidental take authorizations for the Applicant must be halted until the strategy is complete and measures to avoid, minimize or eliminate harm are determined so they can be applied to these projects.

The NARW is one of the most critically endangered species. Based on the population status, the outlook for the survival of the NARW is grim, especially with new threats, including offshore wind energy development. The NMFS’ last five-year review of the NARW, published in 2017, notes that the species’ population grew from 270 to 483 whales between 1990 and 2010; but the number of individuals remaining declined to 440-458 by 2017.<sup>16</sup> The 2017 five-year review further notes that NMFS declared an unusual mortality event (“UME”) under the Marine Mammal Protection Act (“MMPA”) in August 2017 after 15 known NARW deaths occurred within a four-month span. The NARW population has continued to decline. In October 2021, the North Atlantic Right Whale Consortium announced that just 336 individual NARWs remain.<sup>17</sup> The Draft Strategy affirms this dire status in Section 2.3 where it states:

---

<sup>16</sup> *North Atlantic Right Whale (Eubalaena glacialis) 5-year Review: Summary and Evaluation*, NATL. MARINE FISHERIES SERV. GREATER ATLANTIC REGIONAL FISHERIES OFFICE (2017), <https://www.fisheries.noaa.gov/resource/document/5-year-review-north-atlantic-right-whale-eubalaena-glacialis> [hereafter “2017 5-Year Review”].

<sup>17</sup> H.M. Pettis, et al., *North Atlantic Right Whale Consortium 2021 Annual Report Card: Report to the North Atlantic Right Whale Consortium* (2022), [https://www.narwc.org/uploads/1/1/6/6/116623219/2021report\\_cardfinal.pdf](https://www.narwc.org/uploads/1/1/6/6/116623219/2021report_cardfinal.pdf).

*“The potential biological removal (PBR) level for the species, defined as the maximum number of animals that can be removed annually while allowing the stock to reach or maintain its optimal sustainable population level, **is less than 1**”*<sup>18</sup> (Emphasis added)

To be clear, **not one** of the remaining NARW can be lost, an unambiguous and stern statement. It goes on to state: “The species has low genetic diversity, as would be expected based on its low abundance, and the species’ resilience to future perturbations is expected to be very low (Hayes et al. 2018).”<sup>19</sup> This information suggests that any harassment can have population impacts and must be avoided or significantly reduced to protect the NARW population. It is possible that “perturbations” from surveying and vessel activities would likely trigger harassment impacts to the NARW. For the protection of the NARW, all industrial full-scale construction for offshore wind energy should be paused until the federal agencies determine how best to eliminate or avoid all impacts, Level A or B, on the NARW.

Especially in light of the NARW’s critically endangered status, the ongoing Unusual Mortality Event that this species is experiencing and, consequently, the existential threat posed to the species by obstacles to even one individual’s survival, the best scientific literature cannot justify harassing even **one** of the 336 remaining individuals in a short timeframe for the Applicant’s construction activities. Harassing one NARW is not negligible; it is significant. This is particularly true upon consideration of the multitude of additional NARW takings that the Applicant will be pursuing for the continued preconstruction, as well as the construction, operation, and decommissioning phases of the Applicant’s projects. Again, not one NARW can be lost according to federal scientists, as previously noted.

Based on the above that not one NARW can be lost, it is unacceptable for NFMS to not take into account the impacts to one NARW let alone the two takes of this species that is proposed. The Public Notice states: “NMFS notes that, since issuance of the 2022 IHA, a new SAR is available for the North Atlantic right whale (NARW). Estimated abundance for the species declined from 368 to 338. However, this change does not affect our analysis of impacts, as described under the 2022 IHA.”<sup>20</sup> With the continued decline in the NARW and limited female population, it is inappropriate to add more possible impacts to the NARW, and other endangered species.

### ***Lack of Basic Research About Impacts to Large Whales***

In addition, there is a lack of basic research of the impacts of OSW energy development on large whale species in U.S. waters, particularly in the mid-Atlantic region. It is reckless to move forward without the scientific baseline assessments for what harm may or could occur to whales before issuing any permits and authorizations, including IHAs, ITRs, and associated LOAs.

---

<sup>18</sup> U.S. Department of Interior Bureau of Ocean Energy Management and U.S. Department of Commerce National Oceanic and Atmospheric Administration NOAA Fisheries, *Draft BOEM and NOAA Fisheries North Atlantic Right Whale and Offshore Wind Strategy*. October 2022, page 5.

<sup>19</sup> *See id.*

<sup>20</sup> Federal Register, “[Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Offshore of New Jersey](#),” Vol. 88, No. 113, Tuesday, June 13, 2023/Notices, page 38491.



### 1. Failure to include crucial scientific assessments and consultations

In a May 2022 letter obtained under the Freedom of Information Act by Bloomberg Law, Dr. Sean Hayes, PhD, Chief of Protected Species, NOAA NEFSC, clearly documents and confirms the NARW's fragile hold on existence. First, the Chief of Protected Species notes that there are less than 350 remaining NARW animals.<sup>21</sup> Again, COA notes, the Draft North Atlantic Right Whale and Offshore Wind Strategy states that ***not one*** animal can be lost.

Looking later in the development phases of OSW facilities, the letter from Dr. Hayes states:

*The development of offshore wind poses risks to these species, which is magnified in southern New England waters due to species abundance and distribution. These risks occur at varying stages, including construction and development, and include increased noise, vessel traffic, habitat modifications, water withdrawals associated with certain sub-stations and resultant impingement/entrainment of zooplankton, changes in fishing effort and related potential increased entanglement risk, and oceanographic changes that may disrupt the distribution, abundance, and availability of typical right whale food (e.g., Dorrell et al 2022).<sup>22</sup>*

It is clear that any further disturbance of the NARW species will have an impact on this critically endangered species. Some scientists estimate that the species will go extinct within 20 years with current threats.<sup>23</sup>

### 2. Threats to Marine Mammal Health & Survival

The threats to marine mammals, including NARW, include:

*negative impacts to whale habitat which may take the form of development, pollution, noise, overfishing, and climate change. Shipping channels, aquaculture, offshore energy development, and recreational use of marine areas may destroy whale habitat or displace whales which would normally use the area. Oil spills and other chemical pollutants are also a threat to whales and the prey which they feed on.<sup>24</sup>*

Specifically, about offshore wind development impacts on the marine ecosystem, NMFS says,

*Scientists around the world are still investigating the potential impacts of offshore wind energy development on marine life. Site assessment, construction, and operations could interact with marine life on the seabed, in the water, and at the surface. For example, offshore wind energy projects could:*

---

<sup>21</sup> Letter from Sean A. Hayes, PhD, Chief of Protected Species, NOAA NEFSC, to Brian R. Hooker, Lead Biologist Bureau of Ocean Energy Management, Office of Renewable Energy Programs, dated May 13, 2022.

<sup>22</sup> *See id.*

<sup>23</sup> Pennisi, Elizabeth. "The North Atlantic right whale faces extinction." Science, November 7, 2017, <https://www.science.org/content/article/north-atlantic-right-whale-faces-extinction>.

<sup>24</sup> Conserve Wildlife Foundation of New Jersey, "New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale," as seen 12/9/2022, <http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/>

- *Increase ocean noise, which could affect the behaviors of fish, whales, and other species*
- *Introduce electro-magnetic fields that impact navigation, predator detection, communication, and the ability for fish and shellfish to find mates*
- *Change existing habitats by altering local or regional hydrodynamics*
- *Create a “reef effect” where marine life cluster around the hard surfaces of wind developments*
- *Impact organism life cycle stages, including larval dispersal and spawning*
- *Change species composition, abundance, distribution, and survival rates*
- *Increase vessel traffic, which could lead to more vessel strikes*
- *Release contaminants that can be consumed or absorbed by marine life.*<sup>25</sup>

Offshore wind, in the current proposed scale, scope, and magnitude significantly added to the threats to marine mammals, including noise, vessel strikes, and impacts to prey. Access to food sources for large whales is essential. The importance of the waters off New Jersey as feeding grounds for all marine mammals is increasing.

The threats to marine life, including NARW, from offshore wind development activities are year-round. It is documented that North Atlantic right whales are in the region at all times of the year. Data from WhaleMap and the Mid-Atlantic Ocean Data Portal indicate an abundance of NARWs off the NJ coast throughout the year<sup>26</sup>. Further, a Right Whale Slow Zone southeast of Atlantic City was effective in December 2021<sup>27</sup>. According to the Conserve Wildlife Foundation of New Jersey:

*Within the western North Atlantic Ocean, right whales feed during spring, summer, and fall in temperate and subpolar latitudes near eastern Canada and the northeastern U.S. During the winter, many individuals from this population can be found off the northeast coast of Florida and Georgia, their breeding and calving grounds. Some right whales, however, may remain at their northern feeding grounds during the winter.*<sup>28</sup>

Other studies concur finding year-round presence of right whales in the mid-Atlantic (Whitt et al Atlantic). Right whales are present in the mid-Atlantic more often than previously believed.”<sup>29</sup>

The Applicant’s activities will increase the number of vessels in the ocean in the project area, leading to an increased threat of harm by vessel strikes to marine mammals. Specifically,

---

<sup>25</sup> National Oceanic & Atmospheric Administration, National Marine Fisheries Service, “Offshore Wind Energy: Protecting Marine Life,” <https://www.fisheries.noaa.gov/topic/offshore-wind-energy/protecting-marine-life>, as seen 5/14/2023.

<sup>26</sup> See <https://whalemap.org>; <https://portal.midatlanticocean.org>.

<sup>27</sup> National Oceanic & Atmospheric Administration, Fisheries, “Extension of Right Whale Slow Zone Southeast of Atlantic City, NJ.” As seen, 11/15, 2022: <https://content.govdelivery.com/accounts/USNOAAFISHERIES/bulletins/2fef565>.

<sup>28</sup> Conserve Wildlife Foundation of New Jersey, “New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale,” as seen 12/9/2022, <http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/>

<sup>29</sup> New York State Department of Environmental Conservation, “Species Status Assessment,” as seen 12/9/2022, [https://www.dec.ny.gov/docs/wildlife\\_pdf/sgcnnatrightwhale.pdf](https://www.dec.ny.gov/docs/wildlife_pdf/sgcnnatrightwhale.pdf).

“collisions with ships are an increasing threat to right whales...Right whales are especially slow-moving, compared to other large whales, and therefore more susceptible to being struck by ships.”<sup>30</sup> Further, the take authorizations issued by NMFS include the requirement of Protected Species Observers (“PSO”) on board vessels. However, as NOAA itself states: “Right whales can be very difficult to spot from a boat due to their dark color and lack of a dorsal fin. Poor weather and sea state or low light conditions can make spotting these whales nearly impossible.”<sup>31</sup>

COA urges NMFS to specifically assess the cumulative impacts on marine mammals, particularly the NARW, from all the vessels associated with the Applicant’s project as well as other offshore wind projects proposed or underway in this region.

### 3. *Excessive Takes of Marine Mammals*

Under the Marine Mammal Protection Act (“MMPA”), citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region may request authorization for incidental, but not intentional, takes of “**small numbers**” (*emphasis added*) of marine mammals pursuant to that activity for a period of no more than five years.<sup>32</sup> The NMFS, which has been delegated the authority to administer the relevant legal framework, may allow takes under the MMPA only if the agency determines that the total number of authorized incidental takes during the five-year period will have a “negligible impact” on the relevant species or stock.<sup>33</sup> “Negligible impact” is, in turn, defined as an impact that is not reasonably likely or expected to “adversely affect the species or stock through effects on annual rates of recruitment or survival.”<sup>34</sup> Finally, the applicable legal framework distinguishes between “Level A” takes and “Level B” takes. In the context of offshore wind energy development and related activities, “Level B harassment” refers to “any act of pursuit, torment, or announcement which has 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.”<sup>35</sup> “Level A” takings, on the other hand, refer to “any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.”<sup>36</sup>

Recently, NMFS announced a disturbing “biological opinion”<sup>37</sup> for Ocean Wind 1, another massive OSW project proposed off New Jersey, that states the project will “likely to adversely

---

<sup>30</sup> Conserve Wildlife Foundation of New Jersey, “New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale,” as seen 12/9/2022, <http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/>

<sup>31</sup> National Oceanic & Atmospheric Administration, National Marine Fisheries Service, “Reducing Vessel Strikes to North Atlantic Right Whales,” <https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales> as seen on 5/15/2023.

<sup>32</sup> 16 U.S.C. § 1371(a)(5)(A)(i).

<sup>33</sup> *Id.* § 1371(a)(5)(A)(i)(I).

<sup>34</sup> 50 C.F.R. § 18.27(c).

<sup>35</sup> 16 U.S.C. § 1362(18).

<sup>36</sup> *Id.*

<sup>37</sup> National Oceanic & Atmospheric Administration, National Marine Fisheries Service, “NOAA Issuing Biological

affect, but is not likely to jeopardize, the continued existence of any species of ESA-listed whales, sea turtles, or Atlantic sturgeon or destroy or adversely modify any designated critical habitat.” This federal does not exude confidence in the protection of marine life; in fact, it is alarming. This biological assessment and opinion are just for *one* of the many OSW projects – Ocean Wind 1. Cumulatively, with all the issued and pending take authorizations for the 30 projects in the Northeast, how many issued takes will cause impacts on species populations? What are thresholds for action should those cumulative takes cause harm? What are the response plans for impacts to marine mammals should populations decline or be impacted?

a) *COA rejects the numbers proposed in the application as “small.”*

The number of takes in this Draft IHA for the Applicant is **2,856 marine mammals**. These take numbers are not “small;” however, of greater concern is the cumulative impacts of all the projects concurrently under siting and characterization, construction, and operation, and later, decommissioning. The take numbers are outrageous and fail to meet the legal requirements for mammal protection, much less for endangered species.

#### *North Atlantic Right Whales*

The harm that offshore wind energy development may inflict upon NARWs throughout site assessment, construction, and operation, is widely recognized.<sup>38</sup> Offshore wind projects will significantly exacerbate the existing threats posed to NARWs by ship collisions and entanglements. With such low population numbers, and, as noted earlier, based on the recommendation by a federal scientist that not one NARW can be lost, cumulative impacts must be considered for NARWs and other endangered species.

Moreover, the impacts of activities that may be authorized in this IHA request will compound those that already occurred under the terms of the Applicant’s previous IHA for site characterization and assessment. Moreover, the aforementioned sum must be considered alongside other takes of marine mammal species, including the critically endangered NARWs, that NMFS has authorized for other wind activities along the species’ migratory range from North Carolina to Maine. Such authorizations include those for site characterization, assessment, and construction activities that are simultaneously occurring for offshore wind energy development lease sites.

Again, currently, there are **15 Active Incidental Take Authorizations** (for marine site characterizations and construction) and **14 “in process” Incidental Take Authorizations** (for marine site characterizations and construction) for offshore wind projects from Maine to South Carolina. It is also important to note that this take request follows **one** previous IHA application by the Applicant to take marine mammals as a result of preconstruction activities for this

---

Opinion on the Ocean Wind 1 Offshore Energy Project,” April 4, 2023, <https://content.govdelivery.com/accounts/USNOAAFISHERIES/bulletins/352c198>.

<sup>38</sup> See Conservation Law Foundation, et al., *Strong Mitigation Measures Are Essential to Protect the North Atlantic Right Whale During All Phases of Offshore Wind Energy Development* (Feb. 2022), [https://www.nrdc.org/sites/default/files/narw-mitigation\\_feb2022.pdf](https://www.nrdc.org/sites/default/files/narw-mitigation_feb2022.pdf); Vineyard Wind – NGO Agreement (Jan. 22, 2019), <https://www.nrdc.org/sites/default/files/vineyard-wind-whales-agreement-20190122.pdf>.

proposed project alone,<sup>39</sup> and precedes the future take authorizations needed for continued construction, operation, and decommissioning.

Of all species under consideration in this application, the NARW population is the most susceptible to even the slightest harm. Also, COA notes that vessel strikes pose one of the largest threats to NARWs. According to NOAA, “vessels of nearly any size can injure or kill a right whale<sup>40</sup>.” If approved, the survey vessels will add more vessels and round-trip vessel trips to an already busy port region, thereby adding more opportunities for vessel strikes. For accountability and fairness, how and who will determine which vessel struck a NARW or other species if that should happen? Especially given the threat posed to NARWs as a species by even one instance of a vessel collision, and the existence of NARW in the project area, NMFS should reject/deny the Applicant’s request.

In addition, noise is a significant threat to the survival of whales:

*Noise pollution created by ship traffic or offshore construction may negatively impact whales by disrupting otherwise normal behaviors associated with migration, feeding, alluding predators, rest, breeding, etc. Any changes to these behaviors may decrease survival, simply by increasing efforts directed at avoidance of the noise and the perceived threat.<sup>41</sup>*

A growing source of noise pollution that interferes with NARWs’ most vital social functions is offshore wind-related activities. More specifically, low frequency noise from large ships involved in offshore wind-related activities overlaps with the acoustic signals used by right whales. These large whales rely on sound to breed, navigate coastlines, and find food. Right whales communicate with one another by making calls, which can cover distances of more than 20 miles.<sup>42</sup> The calls let whales stay in touch, share information about food, help mates find each other, and keep groups together while traveling.

Rising levels of ocean noise are interfering with whales’ ability to communicate. Anthropogenic noise interferes with their ability to eat, mate, and navigate; therefore, it is essential to their survival that these sounds travel the ocean undisturbed.<sup>43</sup> North Atlantic right whales have been observed increasing their call amplitude with the rise of background noise, and noise pollution has been correlated with an increase in stress-related fecal hormone metabolites.<sup>44</sup>

---

<sup>39</sup> Federal Register, “[Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Ocean Wind II Marine Site Characterization Surveys, New Jersey](#),” /Vol. 87, No. 97/Thursday, May 19, 2022, page 30453.

<sup>40</sup> National Oceanic & Atmospheric Administration, Fisheries, “North Atlantic Right Whale,” as seen 11/15/2022, <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale>.

<sup>41</sup> Conserve Wildlife Foundation of New Jersey, “New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale,” as seen 12/9/2022, <http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/>

<sup>42</sup> Woods Hole Oceanographic Institution, “Right Whales,” as seen 11/15/2022, [https:// www.whoi.edu/know-your-ocean/ocean-topics/ocean-life/marine-mammals/right-whales/](https://www.whoi.edu/know-your-ocean/ocean-topics/ocean-life/marine-mammals/right-whales/).

<sup>43</sup> National Oceanic & Atmospheric Administration, Fisheries, “North Atlantic Right Whale,” as seen 11/15/2022, <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale>.

<sup>44</sup> *North Atlantic Right Whale 5-Year Review*, NOAA FISHERIES SERV. NE. REG’L OFFICE 11-12 (Aug. 2012), [http://www.nmfs.noaa.gov/pr/pdfs/species/narightwhale\\_5yearreview.pdf](http://www.nmfs.noaa.gov/pr/pdfs/species/narightwhale_5yearreview.pdf)

*b. Excessive Takes of Other Marine Mammal Species, including Endangered & Threatened*

Clean Ocean Action finds the variety of species and total number of individual Level B takes proposed by the Applicant unworkable. The Applicant's request is for the taking of a small number of marine mammal species by Level B harassment; the 2,856 marine mammal takes is by far not "small." The takes also include endangered and protected marine mammals, including over 2,700 dolphins of various species.

Bottlenose dolphins are highly social, and arguably the most recognized and beloved small cetacean.<sup>45</sup> In addition to their inherent value to the American public, the dolphins are an increasingly important driver of economic growth for tourism and related industries.<sup>46</sup> The cumulative impact of harassing thousands of bottlenose dolphins may be considerable and irreversible, but these impacts are not considered in the application as currently proposed. How can NMFS justify taking this number of bottlenose dolphins, or any animal for that matter, for construction of one private company's offshore wind projects? These shortcomings merit the rejection of the Applicant's take request.

Furthermore, COA also strongly encourages NMFS to reject the take request due to deficiencies in its analysis concerning the proposed activities' effects on harbor seals. Frequently spotted along both the East and West Coasts of the U.S., harbor seals are known for resting on floating ice with their head and rear flippers elevated in a "banana-like" position, leading to their popularity with excited winter beach-goers.<sup>47</sup> Besides their wide recognition among the American public, harbor seals also play a major role in maintaining balance in marine food webs as well.<sup>48</sup>

Despite the unique importance of this species, however, COA maintains there is not sufficient baseline information about how harbor seals use the waters at the Applicant's lease site to conclude that the activities covered by the application will have a negligible impact on harbor seals. More specifically, a COA employee attended a virtual "Science Saturday" event in early 2022 at which a representative of the New Jersey Department of Environmental Protection ("NJDEP") indicated that, to date, no one has tracked harbor seals to understand the species' pre-construction use of offshore wind energy lease areas off the NJ coast.<sup>49</sup> This admission strongly suggests that decisionmakers do not yet have sufficient information about the role of these lease

---

<sup>45</sup> *Common Bottlenose Dolphin*, MARINE MAMMAL CENTER (visited Feb. 28, 2022), <https://www.marinemammalcenter.org/animal-care/learn-about-marine-mammals/cetaceans/common-bottlenose-dolphin>.

<sup>46</sup> *The Economic of Marine Mammals*, MARINE MAMMAL COMMISSION (visited Feb. 28, 2022), <https://www.mmc.gov/priority-topics/value-marine-mammals/>.

<sup>47</sup> *Harbor Seal*, NATL. MARINE FISHERIES SERV. (visited Feb. 28, 2022), <https://www.fisheries.noaa.gov/species/harbor-seal>.

<sup>48</sup> *Seals*, INTL. FUND FOR ANIMAL WELFARE (visited Feb. 22, 2022), <https://www.ifaw.org/animals/seals#:~:text=As%20one%20of%20the%20keystone,%2C%20polar%20bears%2C%20and%20sharks>.

<sup>49</sup> "Science Saturday: Offshore Wind," LONG BEACH ISLAND FOUNDATION OF ARTS AND SCIENCES (Feb. 19, 2022). Specifically, the NJDEP representative identified the tracking of harbor seals off the NJ coast to understand their use of lease areas prior to the construction of offshore wind turbines as a project concept that NJDEP is currently considering.

areas in harbor seals' life-cycles to substantiate the numbers of harassments expected to occur by this application. With this in mind, the Applicant requests the taking of **13** harbor seals and **13** gray seals by Level B takes. With so little baseline information available about seals and their use of the project area and waters off New Jersey, NMFS should therefore reject the Applicant's take request.

***B. Unprecedented number of whale deaths occurring in a short period of time along the NJ/NY coast starting in December 2022***

Further, according to reports of dead marine mammals to Clean Ocean Action, Marine Mammal Stranding Center<sup>50</sup> as well as media reports and firsthand experiences reported to COA to date, at least **21 whales and 34 dolphins & porpoises** have washed ashore dead in the NY/NJ region since December 2022. There could be many more as stranding records are not publicly communicated from federal agencies. COA, along with members of the public, including over 390,00 people, have called for a pause in any offshore shore wind related activities until an investigation is conducted into the potential causes of the whale and dolphin deaths. Based on the NMFS list of impacts caused by offshore wind, which includes noise and ship strikes, it is plausible that the preconstruction offshore wind activities to thoroughly and independently investigate whether these activities are connected with these marine mammal deaths. Indeed, there are more harassment authorizations under review and in process.

In response to this request, NMFS, BOEM and Marine Mammal Commission have denied a possible link; however, no evidence has been presented to detail these findings by the agencies, to date. Following the denials, these agencies stated that the whale deaths were due to increased ship strikes and increased whale populations in the region. However, no substantiating data was provided on either alleged cause. Can the NMFS provide studies and evidence that whales are increasing in the region during the winter?

It should be noted that less than 50% of the whales had evidence of ship strikes, and ship strikes do not necessarily determine cause of death. Whales may have been hit after death or been impaired by another cause, and then secondarily hit by a vessel. Also, due to their erratic and frequent activity, survey ships should not be discounted as a cause without evidence.

To fact check the increased shipping narrative, COA reviewed the data from the Port Authority of NY/NJ Twenty Equipment Unit (TEU) data, which shows commerce was down over 20% in December, when whales first started frequently washing-up, and commerce declined about 25% to date from January - March of 2023.<sup>51</sup> Therefore, it is not accurate to say increased shipping was the definitive cause of ship strikes on whales during this time.

It is imperative for an independent investigation to identify the cumulative impacts of preconstruction activities on marine life prior to moving forward with reviewing and issuing

---

<sup>50</sup> Marine Mammal Stranding Center, "NJ Cetacean Strandings from December 2022 Through Present," <https://mmsc.org/cetaceans-2002-2023> as seen 5/15/2023.

<sup>51</sup> The Port Authority of New York and New Jersey, "Facts and Figures," as seen 4/30/2023, <https://www.panynj.gov/port/en/our-port/facts-and-figures.html>.

further harassment authorizations, whether it be for marine site characterizations or construction, operation, and decommissioning phases of OSW projects. COA urges NMFS to reject the Applicant's take request.

## **II. Other Issues of Importance, including Lack of Fairness, Transparency, and Accountability**

The concerns discussed in the previous section are not exhaustive; as the MMPA recognizes, every marine mammal is important, and the effects of the proposed activities on other species—including those that are actively included in the recent unprecedented whale deaths and the Unusual Mortality Events, such as the North Atlantic right whale and humpback whale—should encourage NMFS to demand more baseline data and severely restrict the Applicant's authorized takes for the activities in question. COA consequently urges NMFS to reject the Applicant's IHA request.

Further, a serious issue of concern is a lack of accountability. Again, as referenced above,

*By 2030 the Northeast large marine ecosystem will be occupied by over 2.4 million acres of leases, 3,400 turbines, and 10,000 miles of submarine cables; and an additional 5.7 million acres is also under consideration for further development.<sup>52</sup>*

Never has an ecosystem been under such massive industrial development pressure and impact over a span of less than decade. Given this unimaginable and unprecedented scope and scale of industrial OSW development in the Northeast region, and off NY/NJ coasts in particular, NMFS must provide clarity and due process *now* for the determination of accountability. At what point will there be too many accumulated Level A and Level B harassments from OSW energy development or other activities? What are the guardrails to determine how many takes will be too many? How will NMFS distinguish between impacts, such as those from the wind industry as compared to those from other shipping traffic, especially as wind facilities are built-out and marine life and ships are concentrated into more narrow corridors? Who will be responsible and how will accountability be managed? How will the number of takes be lowered over time to address the additional, cumulative stress to marine life? Or will it be?

On another matter, how will population dynamics be measured as species populations decline from stress or injury from offshore wind development? Or food scarcity as migratory fish populations move or as fish structure changes? Or will the agencies simply place blame on “climate change” as a catch-all to lower populations of marine mammals? How many marine mammals can be harassed and injured before the populations, and associated ecosystems, collapse, all for the current unfounded benefits of the new offshore wind energy industry? How many takes, for individual projects or requests or cumulatively, are too many? The current process by which takes are evaluated must include cumulative impacts to populations from all

---

<sup>52</sup> Andy Lipsky, NOAA Fisheries. “Fisheries, Wildlife, and Ecosystem Science in a New Era of Offshore Wind Energy Development.” NOAA Ecosystem Based Management and Ecosystem Based-Fisheries Management Seminar Series, March 9, 2022, <https://www.youtube.com/watch?v=Dh7yBEDHzL8>.



incidental take requests and authorizations. These questions and issues, among others, must be addressed at the outset to ensure transparency and accountability for the impacts to the living marine ecosystem from this wholesale, rapid industrial development of the ocean.

Further, numerous IHAs have already been issued, and ITRs and NOAs for construction are already in process for many OSW energy projects in the region and along the East Coast of the United States. It is essential that systems are in place to monitor the impacts from these activities in these areas. Impacts must be documented and fully investigated to inform forthcoming incidental take requests and authorizations. Monitoring reports are not enough. It is necessary for on-the-ground independent scientists and response teams to be in the areas included in incidental take authorization areas to monitor for impacts so immediate response or investigation can occur.

As an example, on December 5, 2022, an infant endangered Sperm Whale washed-up on the beach in Keansburg, NJ.<sup>53</sup> Thankfully, volunteers at the Marine Mammal Stranding Center were able to be on the scene. Given that massive, large-scale offshore wind project activities are already underway in this region, an organization charged with responding to an endangered marine mammal incident should be fully funded by the state and federal agencies to collect the animal, if possible, or be provided the means to conduct a thorough and immediate investigation, including a comprehensive necropsy, to determine that cause of death. The investigation should include what, if any, offshore wind energy related activities, or other offshore activities, were ongoing within the window of time the animal was potentially impacted. An immediate response and thorough investigation of such incidents is necessary to ensure accountability and the protection of marine mammal species.

Of further note, COA protests the double standard that has developed for the offshore wind industry when it comes to protecting marine mammals. COA acknowledges the importance of reducing other common harms to NARWs and other marine mammals, such as entanglements and vessel strikes, but these efforts to help the species will be of limited benefit if they coincide with an increased tolerance for other activities that torment and annoy these invaluable creatures. The noise, electromagnetic fields, and drilling associated with offshore wind development and the site characterization activities that precede them, as well as the construction, operation, and decommissioning activities, must be treated as the serious and amplifying threats to the NARW, and other marine mammals, that they are—no different than entanglements or vessel strikes. NMFS should seize the opportunity to set a strong precedent for protecting NARWs and all whales by denying the Applicant’s take request.

### III. Conclusion

In sum, COA urges the NMFS to reject and deny the Applicant’s harassment “take” request of **2,856 marine mammals** for marine site characterization activities for an offshore wind power plant and the associated export cables. It is clear the Applicant’s activities would cause an unacceptable number of Level B harassments of extremely at-risk and endangered North Atlantic

---

<sup>53</sup>Radel, Dan. “Infant 12-foot sperm whale washes up dead on Keansburg beach.” Asbury Park Press, 12/5/2022. <https://www.app.com/story/news/local/animals/2022/12/05/keansburg-nj-infant-sperm-whale-washes-up-dead-beach/69703142007/>

right whales, as well as an unacceptable amount of Level B take authorizations for other marine mammal species, including other federally protected whales, dolphins, porpoises, and seals.

For the North Atlantic right whale, the activities in question are reasonably likely or expected to adversely affect this critically endangered species—both individuals and the stock as a whole—through effects on the species’ annual rates of recruitment and survival; this impact cannot reasonably be merely minimal or negligible. It is imperative that NMFS engage in all means possible to avoid harassment to all the uniquely significant species protected by the MMPA, especially the NARW, and to protect ecosystems.

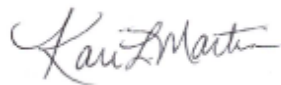
In addition, the cumulative impacts from all incidental take requests and authorizations for offshore wind projects in the same region, as well as for other uses, must be considered when reviewing each application for “takes” of marine mammal species. The total takes for all species affected must be considered alongside takes that NMFS has authorized for other wind activities including for site characterization, assessment, and construction activities (and later, operation and decommissioning activities) that are simultaneously occurring in the region and in the migration areas for marine life.

For the foregoing reasons, COA strongly urges NMFS to reject Orsted’s request for an Incidental Harassment Authorization for marine site characterization surveys for the Ocean Wind II offshore wind project off the NY/NJ coast. Please feel free to contact us with any questions or if you would like to further discuss the concerns outlined and presented in these comments.

Respectfully submitted,



Cindy Zipf  
Executive Director



Kari Martin  
Advocacy Campaign Manager

Submitted via email to [ITP.Esch@noaa.gov](mailto:ITP.Esch@noaa.gov).

July 13, 2023

Jolie Harrison, Chief, Permits and Conservation Division,  
Office of Protected Resources  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
U.S. Department of Commerce

Re: Comments on Proposed Incidental Take Request for Ocean Wind II  
NOAA–NMFS–2023-12604

On behalf of Green Oceans, I am submitting comments on Ocean Wind II’s request for incidental takes of marine mammals secondary to site characterization surveys offshore New Jersey. Green Oceans (<https://green-oceans.org>) is a grassroots nonprofit organization dedicated to protecting the health of the ocean, its ecosystems, and all the life they sustain, from the smallest microorganism to the largest whale. Green Oceans has never accepted funds from any other group or organization, nor have they accepted funds or assistance from any individuals outside of their local membership. They support climate activism and CO2 reduction, but no empirical study has ever demonstrated that offshore wind farms with either reduce CO2 emissions, help climate change, or reduce our dependency on fossil fuels. Without proven benefits, these projects cannot justify the harm they will inflict on the marine ecosystem in general and marine mammals in particular.

Thus, approving this ITR violates the MMPA and the intent of the Executive Order 14008. We must ensure that fulfilling state mandates does not supplant our efforts to address climate change with efficacious solutions. Maintaining biodiversity and the health of the ocean is our best defense against climate change. The full extent of site characterization surveys, including the ones proposed for Ocean Wind II, threaten both. Marine mammals—and in particular, large whales—play a critical role in marine ecosystems by transferring nutrients that enhance phytoplankton productivity both horizontally and vertically in the water column, and by contributing to carbon sequestration. Impacts to the abundance or distribution of marine mammals can disrupt vital systems that regulate the ocean and the climate. As specified in the MMPA, NMFS must both protect and promote the health of these species.

This submission draws heavily on a prior submission written by Lizzie Lewis of Eubanks Legal on behalf of Green Oceans for the Revolution Wind project. As the science has progressed, we have included several additions to our prior submission and have adjusted the details to reflect the specifics of the Ocean Wind II site characterization project.

As detailed below, NMFS has failed to comply with the MMPA’s mandate to ensure that marine mammals are “protected and encouraged to develop to the greatest extent feasible,” with the “primary objective” being “to maintain the health and stability of the marine ecosystem.” 16 U.S.C. § 1361.

Given the serious adverse impacts that the Project will have on marine mammals, including the highly imperiled North Atlantic right whale, the best course of action would be for NMFS to withdraw the proposed ITR and refuse to issue any incidental take authorizations for offshore wind energy projects until a programmatic review of offshore wind energy is conducted. At a minimum, we urge NMFS to withdraw the proposed ITR for the Project so that the deficiencies identified below can be remedied and a legally adequate proposed ITR issued.

Sincerely,

Elizabeth Quattrocki Knight, M.D., Ph.D.

Key fatal flaws with the ITR:

1. The submission does not properly consider the request in the larger context of the other projects, their construction, and the other site characterization studies. The cumulative “takes” become unreasonably large and violate both the language and meaning of both the MMPA and the ESA.
2. The ITR does not properly consider the cumulative and interaction effects of this project with other projects in the area. The acoustic stress and habitat losses will cause far greater harm than anticipated as a result.
3. The thresholds for acoustic injury are no longer validated by the best available science.
4. NMFS has not taken into account the concept of rectified diffusion and how seismic surveys, through this mechanism, may injure marine mammals (Crum 1996, attached below).
5. The ITR does not properly incorporate the importance of interspecies cooperation and communication and how increasing underwater noise will affect marine survival as a result.
6. The numbers of takes, particularly with respect to the North Atlantic Right Whale (NARW), rely on mitigation methods that remain unproven.
7. Enforcement and recording are inadequate.
8. Repercussions for exceeding the number of takes remain insufficient as either a deterrent or as compensation for the destruction incurred.
9. The request does not properly value biodiversity in its assessment of harm.

## I. BACKGROUND

Exposure of marine mammals to anthropogenic underwater sound may constitute “take” if the pressure level of the received sounds has the potential to cause injury or behavioral disturbance. Relevant here, “NMFS generally predicts that marine mammals are likely to be behaviorally harassed in a manner considered to be Level B harassment when exposed to underwater anthropogenic noise” above one of two criteria thresholds, depending on the source sound category. Where the source sound is continuous NMFS considers take to have occurred where the received root-mean-square sound pressure levels (RMS SPL) is above 120 dB (referenced to 1 micropascal (re 1 mPa)) (“120 dB threshold”). Id. Where the source sound is impulsive or intermittent, NMFS considers take to have occurred where the received RMS SPL is above 160 dB re: 1 mPa (“160 dB threshold”). Id.

“The effect of this set of requirements is to insist that the management of the animal populations be carried out with the interests of the animals as the prime consideration.” *Id.* (emphasis added).

The MMPA permits NMFS to issue authorizations to allow the “incidental, but not intentional,” taking of marine mammals while engaging in a specified activity other than commercial fishing. If, based upon the best scientific evidence available, NMFS determines that the proposed taking satisfies these criteria—i.e., that the taking will have a negligible impact on the affected stocks and species...

## II. FACTUAL BACKGROUND

The Project area is habitat for sixteen species of marine mammals, including five species of large cetaceans. Of the six large whale species, four—the North Atlantic right whale, fin whale, sperm whale, and sei whale—are listed as endangered under the ESA and thus, are considered depleted and strategic stocks under the MMPA. Eight small cetacean species are likely to be present in the Project area, including the harbor porpoise, which is known to be one of the most noise-sensitive marine mammal species. *Id.* Two species of pinniped—the harbor seal, the harp seal, and the grey seal—are also likely to be in the Project area. *Id.*

As NMFS is aware, the conservation status of the North Atlantic right whale is particularly dire, and thus requires special consideration. With an estimated 334 individuals remaining, the North Atlantic right whale is one of the world’s most endangered whales. See Draft Strategy at 5. Its population has declined by 25% since 2010, and calving rates have significantly decreased, compromising the viability and resiliency of the population. See NMFS, 2017–2020 North Atlantic Right Whale Unusual Mortality Event, <https://tinyurl.com/333f6968> (updated Jan. 12, 2023) [hereinafter NMFS, Unusual Mortality Event]. If the current rate of population decline continues, the species will be functionally extinct by 2040. See Joanna Walters, North Atlantic right whales may face extinction after no new births recorded, *THE GUARDIAN*, Feb. 26, 2018, <https://tinyurl.com/mr368e9b> (quoting Mark Baumgartner, marine ecologist at the Woods Hole Oceanographic Institution).

The proposed ITR also proposes to authorize Level B takes for 2 critically endangered North Atlantic right whales, as well as 4 endangered fin whales, 8 minke whales, 4 humpback whales, and 1 endangered sei whales, for a total of 19 large cetaceans, 2 pilot whales, 2374 dolphins and porpoises, and 26 pinnipeds, for a total of 2421 marine mammals, for site characterizations over the course of just one year.

## DISCUSSION

### I. NMFS’S SMALL NUMBERS FINDING IS UNJUSTIFIED

NMFS’s blanket interpretation of “small numbers” leads to absurd results. NMFS justifies the large take of species by insisting that the “maximum number of takes possible within any one

year and proposed for authorization relative to the best available population abundance is low.” However, the take of thousands of marine mammals can hardly be said to be “small.” Without any additional explanation, NMFS’s determination is arbitrary and capricious. See *State Farm*, 463 U.S. at 43.

Second, the agency’s approach also fails to account for the additive and adverse synergistic effects of animals being exposed to similar wind development activities that are authorized to occur in the same or adjacent areas, affecting the same species and populations. Currently, there are 15 active IHA authorizations for wind development activities in the waters offshore of the East Coast. See NOAA, *Incidental Take Authorizations for Other Energy Activities*. Collectively, those authorizations allow for the take of 243 North Atlantic right whales, or 73% of the population. This amount constitutes more than “small numbers” even under NMFS’s arbitrary 33% threshold. Clearly, a sum that exceeds the total number of alive individuals in a population cannot be considered “small.”

The importance of considering additive impacts in its small numbers analysis is particularly evident when viewed within the context of the rapid expansion of wind development in the offshore waters of the Northeastern United States. In addition to the active IHAs, 9 applications for incidental take authorizations in connection with offshore wind projects are currently under review by NMFS, including the application submitted by Ocean Wind II. See NOAA, *Incidental Take Authorizations*. When take is compiled across the 9 projects, it becomes clear that over the next 10 years, NMFS could authorize take amounting to greater than 100% of some species. For example, together, the 9 applications request authorization to take 203% of the declining North Atlantic right whale population, 172% of humpback whales, and 112% of common dolphins. This result is not acceptable under any rational definition of “small numbers.”

Finally, as discussed below, it is likely that NMFS has significantly underestimated the Level B takes in the proposed IHA due to its reliance on the outdated threshold criteria. Accordingly, it is highly likely that even greater numbers of marine mammals, including the North Atlantic right whale, will be subjected to Level B harassment. Agency decisions are arbitrary and capricious where the agency “offer[s] 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.” *State Farm*, 463 U.S. at 43. Accordingly, where, as here, the agency’s conclusion relies on incorrect or inaccurate data, its decision is arbitrary and capricious and must be rejected. See, e.g., *Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 502–03 (9th Cir. 2014) (overturning agency’s determination as arbitrary and capricious after finding agency assumptions were made based on contradictory estimates and without rational basis in record); *Ky. Riverkeeper, Inc. v. Rowlette*, 714 F.3d 402, 410 (6th Cir. 2013) (overturning as arbitrary and capricious agency’s permit reauthorization where agency relied on inappropriate estimates to gauge impact of reauthorization); *Sierra Club v. EPA*, 671 F.3d 955, 965–66 (9th Cir. 2012) (overturning as arbitrary and capricious agency’s action where it failed to consider newer “data [that] told a different story than . . . earlier data” that the agency had actually relied upon, and where the agency had failed to provide an adequate explanation for its reliance on outdated data).

## II. NMFS’S SMALL NUMBERS DETERMINATION FAILS TO CONSIDER THE CONSERVATION STATUS OF THE NORTH ATLANTIC RIGHT WHALE

Over the year covered by the ITR, NMFS estimates that only 2 additional North Atlantic right whales will potentially be exposed to sounds at or above the behavioral take thresholds (160 dB for pulsed sounds and 120 dB for continuous sounds). Yet, combined with other projects along the coast, the total takes rises to 245. This does not take into account applications currently under review.

Both federal courts and NMFS itself have recognized that percentages of approximately 10-12% of marine mammal populations constitute more than a “small number.” For example, in *Natural Resources Defense Council, Inc. v. Evans*, the Northern District of California stated that “[a] definition of ‘small number’ that permits the potential taking of as much as 12% of the population of a species is plainly against Congress’ intent.” 279 F. Supp. 2d 1129, 1153 (N.D. Cal. 2003). NMFS has likewise acknowledged that the harassment of between 12-14% of Western Arctic bowhead whales, which are closely related to North Atlantic right whales, “represent[s] a sizeable portion” of the population. 73 Fed. Reg. 66,106, 66,111 (Nov. 6, 2008). Accordingly, NMFS must do more to justify why even 12% of a population is a “small” number of whales; the proposed ITR’s bare assertion to that effect is insufficient to justify NMFS’s finding. See *Lone Mountain Processing, Inc. v. Sec’y of Labor*, 709 F.3d 1161, 1164 (D.C. Cir. 2013) (“[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored. Failing to supply such analysis renders the agency's action arbitrary and capricious.” (internal quotation marks and citation omitted)). For *Ocean Wind II*, the NMFS proposes to authorize takes for numbers that constitute over 12% of the stock in over 8 species. Clearly, this violates the intent of the MMPA.

NMFS’s assertion is rendered even more arbitrary by its failure to account for the North Atlantic right whale’s population and distribution trends. As discussed, the North Atlantic right whale population is undergoing a precipitous decline; without drastic action—which to date, has failed to manifest—the species will be functionally extinct by mid-century. Thus, over the life of the ITR, those 300 affected whales will constitute an increasing percentage of the population. In fact, the proposed ITR already underestimates the proportion of the population that will be affected; based on the most recent population data, 90% of the population could be affected. NMFS must do more to justify its determination that an action that proposes to take over 9 out of every 10 of the few remaining North Atlantic right whales complies with the MMPA’s small numbers mandate.

### III. THE PROPOSED ITR’S USE OF THE OUTDATED 160 DB THRESHOLD CRITERIA FOR BEHAVIORAL TAKE IS ARBITRARY

In quantifying the impacts of activities on marine mammal behavior, NMFS relies on its historic take threshold criterion for impulsive or intermittent sources: a single, bright-line, sound pressure-based threshold for harm of 160 dB, see 87 Fed. Reg. at 79,110, below which it assumes that no animal would experience a “potential . . . disruption of behavioral patterns,” 16 U.S.C. § 1362(18)(A)(ii). However, this approach is arbitrary in several respects.

First, the 160 dB threshold for behavioral, sublethal take does not reflect the best available science. Indeed, leading biologists and bioacousticians, including those whose work the agency

frequently cites, have criticized the threshold as “overly simplified, scientifically outdated, and artificially rigid,” and explained that the use of such a threshold to “predict potential impacts of discrete events . . . is of great concern.” Christopher W. Clark et al., Comments on Arctic Ocean Draft EIS at 2 (Feb. 28, 2012), available at <https://tinyurl.com/5fsfmwst>.

The 160 dB threshold is purportedly based on a 1999 report from the High Energy Seismic Survey, and is based upon data gathered during seismic surveys in the 1980s. See *id.*; 77 Fed. Reg. 27222 (May 11, 2012) (citing the origin of the 160 dB threshold as a pair of studies on migrating grey and bowhead whales from the mid-1980s). However, improved technology, data collection methods, and other advancements in biology and acoustics have since demonstrated that behavioral disruptions from pulsed sources—and thus, “take”—can occur well below the 160 dB threshold. See Christopher W. Clark et al., Comments on Arctic Ocean Draft EIS, *supra*. As has been repeatedly explained to the agency, “[t]he working assumption that impulsive noise never disrupts marine mammal behavior at levels below 160 dB (RMS), and disrupts behavior with 100% probability at higher levels has been repeatedly demonstrated to be incorrect.” *Id.* NMFS’s continued adherence to this threshold both ignores the best available science and results in an underestimation of individuals that could potentially be subjected to take as a result of proposed activities. As a result, any determination that relies on this threshold is arbitrary and capricious. See *Sierra Club*, 671 F.3d at 965–66 (9th Cir. 2012) (overturning as arbitrary and capricious agency’s action where it failed to consider newer “data [that] told a different story than . . . earlier data” that the agency had actually relied upon, and where the agency had failed to provide an adequate explanation for its reliance on outdated data).

Second, the selection of the 160 dB threshold is not sufficiently conservative and violates the plain language of the statute defining take as any action with the “potential” for causing behavioral disturbance. 16 U.S.C. § 1362(18). Consequently, actual disturbance is not required. To define the zone of harassment (and thus, “take”), NMFS estimates the distance to the 160 dB isopleth (i.e., the distance within which received levels from a sound source are expected to meet or exceed the take threshold). 87 Fed. Reg. at 79,115. The agency then predicts the number of marine mammals that are expected to occur within the zone over the course of Project activities. *Id.* Individuals who do not cross the harassment isopleths are not considered to be “taken” by the activities and thus, do not factor into NMFS’s small numbers or negligible impacts analyses.

Recent research establishes that for some species, behavioral disruption can occur at received levels that are substantially lower than the 160 dB threshold (or, for that matter, the 120 dB threshold for continuous sound). The behavioral disruptions documented by such research clearly fall under the MMPA’s definition of “take.” However, where behavioral responses occur at received levels below the 160 dB threshold—and thus, beyond the 160 dB isopleth—they are not factored into the agency’s consideration of the Project’s impacts. NMFS’s adherence to the outdated 160 dB threshold thus fails to capture a significant amount of the take that actually occurs as a result of proposed activities, and further, fails to account for the “potential” of such activities to result in take. As a result, NMFS’s use of the threshold contravenes the plain language of the statute and cannot withstand scrutiny. See *Smith v. City of Jackson, Miss.*, 544 U.S. 228, 266 (2005) (“[I]t is elementary that ‘no deference is due to agency interpretations at odds with the plain language of the statute itself.’” (quoting *Pub. Emps. Ret. Sys. of Ohio v. Betts*, 492 U.S. 158, 171 (1989))); cf. *Ocean Mammal Inst. v. Gates*, 546 F. Supp. 2d 960, 973–



75 (D. Haw. 2008) (suggesting that the use of take thresholds that are not supported by the best available science and that ignore behavioral responses at lower received levels is arbitrary and capricious).

Third, the method represents a major step backward from recent programmatic authorizations. For Navy sonar activity, NMFS has incorporated into its analysis linear risk functions that endeavor to take account of risk and individual variability and to reflect the potential for take at relatively low levels. See, e.g., 74 Fed. Reg. 4844, 4844-4885 (Jan. 27, 2009). In the wake of these past authorizations for acoustic impacts on marine mammals, the agency's reversion to a single, non-conservative, bright-line threshold for all species is not tenable.

#### IV. NMFS'S NEGLIGIBLE IMPACTS FINDING IS UNJUSTIFIED

NMFS has defined "negligible impact" to mean "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival." 50 C.F.R. § 216.103. NMFS must base its negligible impact determination on the "best available scientific evidence." Id. §§ 216.102(a), .104(c).

Here, the proposed ITR fails to support NMFS's negligible impact finding for several reasons, including the failure to use the best available science when considering the impacts of stress, the failure to use the best available science when considering the Project's impacts on North Atlantic right whales, and the failure to accurately define the environmental baseline.

##### A. NMFS FAILS TO ACCURATELY ACCOUNT FOR THE IMPACTS OF ANTHROPOGENIC NOISE ON MARINE MAMMAL STRESS

The proposed ITR discusses the potential for temporary hearing damage to marine mammals as a result of the Project; however, such injuries are not the sole source of potential harm. As recent research demonstrates, exposure to intermittent or continuous anthropogenic noise has the potential to induce a state of chronic stress in marine mammals. See J.W. Wright et al., *Concerns Related to Chronic Stress in Marine Mammals*, IWC SCI. COMM. DOC. IWC/SC/61/E16 (2009). Chronic stress can have adverse health consequences on marine mammals, including higher mortality and morbidity, reduced reproductive success, immuno-suppression, heart disease, depressed reproductive rates, physical malformations, and birth defects. See A.J. Wright et al., *Do marine mammals experience stress related to anthropogenic noise?*, 20 *Int'l J. Comparative Psychology* 274 (2007) (literature review and synthesis). By extension, chronic stress induced by exposure to anthropogenic sound can have a detrimental impact on marine mammal populations by affecting fertility, mortality and growth rates. See *id.*; see also 87 Fed. Reg. at 79,102 ("Chronic disturbance can cause population declines through reduction of fitness (e.g., decline in body condition) and subsequent reduction in reproductive success, survival, or both."). These individual and population-level effects should be taken into consideration in terms of conservation planning and management.

The proposed ITR concedes that chronic stress has significant adverse population-level effects, and further acknowledges that the Project will “contribute to elevated ambient sound levels” and therefore “intensify[] masking.” 87 Fed. Reg. at 79101. However, the proposed ITR insists that the Project is not “expect[ed] . . . to produce conditions of long-term and continuous exposure to noise leading to long-term physiological stress responses in marine mammals.” *Id.* This assertion fails for several reasons.

NMFS’s assumption that the Project will not induce stress in marine mammals because the noise will be intermittent and the duration of exposure will be short lacks any rational basis. The best available science suggests that the lower-level sounds, even when “intermittent,” can still mask communications and “cause distraction, limiting detection of biologically relevant communication or predator sounds.” T. Aran Mooney et al., *Acoustic Impacts of Offshore Wind Energy on Fishery Resources: An Evolving Source and Varied Effects Across a Wind Farm’s Lifetime*, 33 *OCEANOGRAPHY* 82 (2020). These effects are known to induce chronic stress in marine mammals. Rosalind M. Rolland et al., *Evidence that ship noise increases stress in right whales*, *PROCEEDINGS OF THE ROYAL SOCIETY B: BIOLOGICAL SCIENCES* (2012). Moreover, as discussed, low-level noise is known to affect marine mammals occurring outside the Level B take zones established using the outdated threshold criteria. As a result, the proposed ITR underestimates the actual extent of take, and thus fails to consider a factor that is not only highly relevant to, but determinative of, the negligible impact finding. *State Farm*, 463 U.S. at 43.

Relatedly, as discussed below, the proposed ITR fails to consider the aggregate stress impacts that will result from all ongoing activities impacting these same populations. It is well-established that even small impacts, when added to a degraded baseline, may be enough to push the species across the threshold. Cf. Nat’l Res. Council, *MARINE MAMMAL POPULATIONS AND OCEAN NOISE* at 19-20 (“The population effect involves the cumulative impact on all individuals affected. . . . Population consequences of behavioral change result from the accumulation of responses of individuals.”). Some species within the Project area are currently experiencing chronic stress, even before the introduction of additional stressors. For example, the North Atlantic right whale population exhibits numerous signs of severe chronic stress that are at least partly attributable to exposure to anthropogenic noise, including poor body conditions of many adult whales and low calving rates. See 87 Fed. Reg. at 79,153; Rosalind M. Rolland et al., *supra*. Offshore wind development in the region will add additional stressors and thus, only exacerbate the species’ current condition. Indeed, in the recently released Draft Strategy, NMFS acknowledges that “[w]hales that are in compromised condition (e.g., injured, entangled, malnourished) and exposed to stressors from [offshore wind] are more likely to experience severe consequences than healthy animals.” Draft Strategy at 11. The sublethal impacts of offshore wind development can have cascading impacts that ultimately increase individuals’ susceptibility to stressors and reduce reproductive success, causing “significant” impacts on individuals and populations. Cf. 83 Fed. Reg. 19,711, 19,722-23 (May 4, 2018) (discussing marine mammal behavioral responses to underwater sound, including vessel noise). Certain sublethal effects, including displacement from calving grounds, increased ocean noise, reduced lactation, and reduced birth rates, can likewise “have a similar impact on the species as lethal effects, as they reduce the potential for the population to grow,” Draft Strategy at 11. These

impacts “may be compounded by exposure to multiple projects.” *Id.* In light of the stressors that are already present in the region, such as the impacts of climate change, vessel strikes, entanglement, coastal pollution, and other anthropogenic disturbances such as seismic surveys and vessel noise, as well as the species’ declining status, “the resilience of th[e] population to” the introduction of new sublethal “stressors . . . is low.” *Id.* at 6.

Hence, the threat to both individual North Atlantic right whales and the species as a whole posed by offshore wind development is laid plain. However, despite acknowledging that the North Atlantic right whale population shows “high stress levels . . . and poor health, which has further implications on reproductive success and calf survival,” and consequently, “the status of the North Atlantic right whale population is of heightened concern,” 87 Fed. Reg. at 79,153, NMFS’s negligible impacts analysis fails to meaningfully address the impacts that the Project will have on acute or chronic stress in North Atlantic right whales. The agency’s negligible impact determination therefore fails to articulate a rational connection between the facts found—i.e., that stress from anthropogenic noise not only can have, but is currently having, deleterious impacts on marine mammal individuals and populations—and the conclusion that the introduction of additional sources of low-frequency anthropogenic sound will have a negligible impact on affected species. See *State Farm*, 463 U.S. at 43.

#### B. THE PROPOSED ITR FAILS TO EXAMINE THE EFFECTS OF HABITAT DISPLACEMENT ON THE NORTH ATLANTIC RIGHT WHALE

In light of the species’ dire status, the Project’s impacts on the North Atlantic right whale merit special consideration. As explained above, North Atlantic right whales have been documented within the Project area year-round, and the species’ use of the areas in and around the Project area is increasing. See 87 Fed. Reg. at 79,088-89. The habitat that will be impacted by the Project is considered important to the species’ life history functions, including feeding and migration, *id.*; indeed, the Project overlaps a Seasonal Management Area, which was established with the express intent of reducing the risk of vessel strikes. See 73 Fed. Reg. 60,173 (Oct. 10, 2008). The displacement from or abandonment of this habitat could have devastating effects on the species. However, far from engaging in a meaningful analysis of such impacts, NMFS dismisses the effects of habitat displacement or abandonment from the Project by asserting that other feeding and migration habitat remains available. See 87 Fed. Reg. at 79,153. The agency’s cursory treatment of such impacts does not pass muster.

The best available science establishes that the North Atlantic right whale is extremely sensitive to low-frequency continuous noise and the impacts of masking. See Christopher W. Clark et al., *Acoustic masking*, *supra*. Moreover, as explained, populations that are resident or seasonally resident to a particular area, like the North Atlantic right whale, are intensely vulnerable to population-level effects as a result of the cumulative nature of the noise exposure and the additional harm that may be caused by habitat displacement. See K.A. Forney et al., *supra*. Even temporary displacement increases energetic costs as the whales search for new (and possibly less productive) foraging areas and in turn, “could lead to increased susceptibility to other stressors (e.g., a shift in distribution can change the overlap with vessel traffic and fishing activities).” *Draft Strategy* at 10.

Here, NMFS acknowledges that the Project may result in the displacement of North Atlantic right whales from the Project area and its surrounding vicinity. See 87 Fed. Reg. at 79,154. However, instead of engaging in a meaningful quantitative or qualitative analysis of the effects of such displacement, NMFS simply asserts that affected individuals will use other habitat. This cursory statement does not equate to an evaluation of the effects to individuals and the population that may result from the abandonment of this habitat. See *Amerijet Int'l Inc.*, 753 F.3d at 1350 (“[C]onclusory statements will not do; an agency's statement must be one of reasoning.”). For example, NMFS reports that the Project area overlaps a Seasonal Management Area, which was established with the express purpose of reducing the risk of vessel strikes. See 73 Fed. Reg. 60,173 (Oct. 10, 2008). Yet, NMFS does not consider whether abandonment of habitat that was designated with the express purpose of preventing vessel strikes would push the species further into a vessel traffic corridor, thereby elevating the risk to the species. Nor does NMFS consider the additive effects of the Project and other planned activities—including the expansion of wind energy development—expected to occur throughout the region and impacting the same North Atlantic right whales. For example, NMFS never analyzes whether the other habitat areas within the vicinity of the Project will be affected by wind development or other anthropogenic activities that would serve to displace North Atlantic right whales from those areas as well, forcing individuals to travel even further to find suitable habitat at greater energetic costs. Thus, taken together, the Project and other planned activities may result in widespread displacement—or even abandonment—of important habitat in the region, which would indisputably have devastating impacts on the viability and resilience of North Atlantic right whales.

A full evaluation of the risks to the North Atlantic right whale presented by habitat displacement is especially important because “the population size is small enough that the death of even some individuals can have a measurable effect on its population status, trend, and population dynamics.” Draft Strategy at 6. The loss of just one individual in a year reduces the “likelihood of recovery and of the species’ achieving optimum sustainable population.” *Id.* at 6-7. Thus, absent an evaluation of the full suite of impacts to the North Atlantic right whale that will result from all of the Projects—there is no rational basis for NMFS’s determination that these projects will result in the take of only small numbers of North Atlantic right whales, and that such take will have a negligible impact on the species. See *State Farm*, 463 U.S. at 43.

### C. NMFS FAILS TO USE THE BEST AVAILABLE SCIENCE WHEN REACHING ITS NEGLIGIBLE IMPACT FINDING

NMFS must use the “best scientific information available” when determining whether to allow the incidental taking of marine mammals. 50 C.F.R. § 216.102. The proposed ITR fails to comply with that mandate in several respects.

#### 1. NMFS’s Use Of The Outdated Take Thresholds Severely Underestimates The Impact Of Take

Like the small numbers determination, NMFS’s negligible impacts finding relies on the 160 dB threshold for behavioral take in that the proposed ITR assumes that any received levels below that threshold will not result in behavioral disturbances. However, as explained, this assumption

ignores the best available science indicating that the noise level thresholds for behavioral take is seriously outdated and, as a result, underestimates the amount of potential take.

The best available science demonstrates that anthropogenic noise can cause behavioral disturbances at far lower received levels and far greater distances than previously thought. This is especially true for baleen whales, as their vocalizations and acoustic sensitivities overlap with the low-frequency energy that anthropogenic sources tend to introduce into the acoustic environment. For example, bowhead whales have been shown to increase their call rates at the initial detection of impulsive sound sources at received levels as low as 94 dB, which is well below the 120 dB threshold for continuous exposure, let alone its 160 dB threshold for impulsive noise. Susanna B. Blackwell et al., *Effects of airgun sounds on bowhead whale calling rates: Evidence for two behavioral thresholds*, 10 PLOS ONE e0125720 (2015). Such sources have also been known to cause baleen whales to abandon habitat over the same scale. See Kelly MacLeod et al., *supra*. Particularly relevant here, North Atlantic right whales have been shown to respond to relatively low received levels from acoustic alarms (133-148 dB) by breaking off their foraging dives and positioning themselves directly below the water surface. Douglas P. Nowacek et al., *North Atlantic right whales (Eubalaena glacialis) ignore ships but respond to alerting stimuli*, 271 PROCEEDINGS OF THE ROYAL SOC'Y B 227 (2004). Such behavior leaves the whales at a substantially greater risk of vessel strike, which is a primary source of mortality for the imperiled species. NMFS, *North Atlantic Right Whale (Eubalaena glacialis): Western Atlantic Stock, STOCK ASSESSMENT REPORT*, at 25-26 (2022) (“Vessel strikes are a major cause of mortality and injury to right whales.”).

Similar observations have been made in other baleen whale species globally and across behavioral states, affecting foraging, breeding, and migration. See, e.g., Susanna B. Blackwell et al., *Effects of airgun sounds on bowhead whale calling rates in the Alaskan Beaufort Sea*, 29 MARINE MAMMAL SCI. E243 (2013); Manuel Castellote et al., *Acoustic and behavioural changes by fin whales (Balaenoptera physalus) in response to shipping and airgun noise*, 147 BIOLOGICAL CONSERVATION 115 (2012); Salvatore Cerchio et al., *Seismic surveys negatively affect humpback whale singing activity off Northern Angola*, 9 PLOS ONE e86464 (2014). Anthropogenic noise has likewise been shown to affect a broad range of other marine mammal species, including toothed whales. The received levels implicated in all of the cited studies were lower than the 160 dB threshold used to evaluate behavioral impacts in the proposed ITR.

In sum, the scientific literature is replete with examples of behavioral disturbances corresponding to received levels of anthropogenic sound that are well below the 160 dB threshold for behavioral take. Crucially, all of these disturbances indicate responses that elevate metabolic stress, see, e.g., Rosalind M. Rolland et al., *supra*., cause displacement from areas of biological importance, see, e.g., Manuel Castellote et al., *supra*., compromise interspecific communication, see, e.g., Christopher W. Clark, *Acoustic masking in marine ecosystems*, *supra*, and interfere with foraging and other behaviors vital to overall health, see, e.g., *id*.

Hence, it is painfully apparent that the 160 dB threshold for impulsive sources is not supported by the best available science. Behavioral disturbances and impacts can—and often do—occur from exposure to received levels far below the criterion. Reliance on the outdated threshold is

nontrivial; it results in a gross underestimate of the proposed activity's zone of impact, as well as the level of harm, or "take," inflicted on marine mammals. Furthermore, as explained, because the 160 dB threshold fails to account for all of the actual disturbance that may result from the proposed activity, any analysis based upon it necessarily must also fail to capture the extent of potential disturbance. Consequently, the criterion is insufficiently conservative, contravenes the plain language of the definition of "take," and fails to fulfill the statute's protective purpose. NMFS's continued adherence to such an outdated, unsupported threshold is quintessentially arbitrary and capricious. Cf. *Ocean Mammal Inst. v. Gates*, 546 F. Supp. 2d 960, 973–75 (D. Haw. 2008) (suggesting that the use of take thresholds that are not supported by the best available science and that ignore behavioral responses at lower received levels is arbitrary and capricious).

NMFS's failure to account for the best available science is particularly egregious in light of the agency's plans to rapidly expand wind development along the coast of New England. Despite serving as important foraging and migrating habitat to several baleen whale species, including the critically endangered North Atlantic right whale, these areas are already significantly disturbed by anthropogenic noise. See 87 Fed. Reg. at 79,093. Studies indicate that baleen whales have lost a significant portion of their communication space due to increasing ambient noise. See, e.g., Christopher W. Clark, C.W., et al., *Acoustic masking in marine ecosystems*, supra; Lelia T. Hatch et al., *Can you hear me here? Managing acoustic habitat in US waters*, 30 *ENDANGERED SPECIES RES.* 171 (2016). As a result, marine mammals in this geographic area are likely experiencing prolonged states of chronic stress. The use of outdated thresholds artificially shrinks the zone of impacts of actions under review, which likewise reduces the areas where impacts from actions may overlap. As a result, NMFS not only underestimates the actual effects of the proposed action, but also underestimates the additive impacts of the action under review to the ambient soundscapes and the resulting effects to marine mammal populations.

As explained below, an accurate analysis of the proposed action in context is essential to a non-arbitrary negligible impact determination. Here, repeated and at times, continuous, acoustic insults from site characterization surveys, over months and extending to years, would come on top of already urbanized levels of ambient noise and thus pose a threat to marine mammals at the population scale. NMFS's failure to accurately capture the full extent of these effects using the best available science cannot be sustained.

NMFS's use of the 160 dB threshold to evaluate take from the vast majority of Project activities is independently arbitrary for its failure to properly characterize the source noise, which results in the application of the higher threshold and concomitant underestimation of take. Even under NMFS's outdated criteria, continuous sounds may result in behavioral disturbances at much lower received levels, i.e., 120 dB. Accordingly, masking and other behavioral impacts may, perversely, have a greater impact at a distance from a source. See 87 Fed. Reg. at 79,101 (noting that chronic signals intensify masking).

This inference is supported by numerous studies demonstrating that seismic surveys have raised ambient noise levels at significant distances from the array. Sharon L. Nieukirk et al., *Sounds from airguns and fin whales recorded in the mid-Atlantic Ocean, 1999-2009*, 131 *J. ACOUSTIC SOC'Y OF AM.* 1102 (2012); Sharon L. Nieukirk et al., *Low-frequency whale and seismic*

airgun sounds recorded in the mid-Atlantic Ocean, 115 J. ACOUSTIC SOC'Y OF AM. 1832 (2004); Ethan H. Roth, et al., Underwater ambient noise on the Chukchi Sea continental slope from 2006–2009, 131 J. ACOUSTIC SOC'Y OF AM. 104 (2011); J. Gedamke, J, Ocean basin scale loss of whale communication space: potential impacts of a distant seismic survey, in ABSTRACTS OF THE 19TH BIENNIAL CONFERENCE ON THE BIOLOGY OF MARINE MAMMALS (2011). Indeed, NMFS's own expert Open Water Panel for the Arctic has characterized such impulsive sounds as mixed impulsive/continuous noise source, and recommended that the agency evaluate the impacts on that basis. J. Burns et al., OPEN WATER REVIEW PANEL FINAL REPORT at 10 (2010); H. Brower et al., OPEN WATER REVIEW PANEL FINAL REPORT at 9 (2011). NMFS cannot ignore this science. See *Dist. Hosp. Partners, L.P. v. Burwell*, 786 F.3d 46, 57 (D.C. Cir. 2015) (noting that administrative law principles “underscore that an agency cannot ignore new and better data”).

In sum, NMFS's use of the outdated take thresholds is arbitrary and capricious, and undermines the entire negligible impacts analysis. To correct these fatal errors, NMFS must revise its generalized behavioral take thresholds to accurately reflect the best available science indicating that sensitivity to anthropogenic sound varies between marine mammal species. NMFS must then reexamine its take estimates in light of the revised criteria. NMFS must also consider that behavioral disturbance can amount to Level A take if it interferes with the essential life functions of severely depleted marine mammal species, such as the North Atlantic right whale, through secondary effects including displacement from migration paths or behavioral or physiological responses to chronic stress.

## 2. The Proposed ITR Fails To Meaningfully Consider The Impacts Of Masking

The proposed ITR's treatment of masking in its “negligible impact” analysis fails to meaningfully examine the effects of the loss of communication space on marine mammals and further, seems to misapprehend the spatial and temporal scope of the effects implicated here. The proposed ITR also concedes both the myriad adverse effects of masking on marine mammals, particularly on low-frequency hearing specialists, see 87 Fed. Reg. at 79,100-02, and that “[a]ll anthropogenic sound sources, . . . contribute to elevated ambient sound levels, thus intensifying masking.” The proposed ITR proceeds to acknowledge that masking may occur from the Project. Nor does the proposed ITR attempt to meaningfully describe, quantitatively or qualitatively, the Project's contribution to background ambient noise. The proposed ITR concludes that “the nature of Ocean Wind II's activities, paired with habitat use patterns by marine mammals, does not support the likelihood that the level of masking that could occur would have the potential to affect reproductive success or survival.” *Id.* Absent any analysis of the actual range within which marine mammals may experience masking or loss of communication space, there is no rational basis for NMFS's conclusion that the addition of significant sources of anthropogenic noise into habitat that is “important” to many marine mammal species, including the critically endangered North Atlantic right whale, will have negligible effects. See *Michigan v. EPA*, 576 U.S. 743, 750 (2015) (noting that agencies “are required to engage in reasoned decisionmaking,” which includes the requirement that the “process by which it reaches that result . . . be logical and rational” (internal quotation marks and citation omitted)).

That NMFS failed to meaningfully consider the effects of masking when calculating potential take is further evidenced by the fact that NMFS considered, inter alia, the “acoustic thresholds above which NMFS believes . . . marine mammals will be behaviorally harassed or incur some degree of permanent hearing impairment,” and the area that will be exposed to sound pressures above these levels. In other words when determining the zone of harassment, NMFS considered only whether the area would be exposed to levels exceeding the Level B take thresholds (i.e., 120 dB for continuous noise and 160 dB for impulsive noise across all species) or Level A thresholds. This suggests that NMFS believes that masking effects are co-extensive with the take threshold criteria’s “exposure” areas that the agency modeled for behavioral take. However, the best available science indicates that masking is more closely connected to audibility thresholds than to NMFS’ outdated threshold of behavioral harassment and, in baleen whales at least, operates at a potentially enormous scale. See, e.g., Christopher W. Clark et al., *Acoustic masking in marine ecosystems*, supra; Leila T. Hatch et al., *Quantifying loss of acoustic communication space for right whales in and around a U.S. National Marine Sanctuary*, 26 *CONSERVATION BIOLOGY* 983 (2012). It would be plainly erroneous for NMFS to evaluate masking effects as though they were conditioned on a 160 dB harassment zone.

Impulsive sounds have also been shown to mask the calls of vocalizing baleen whales over vast distances, substantially compromising their ability to communicate, feed, and engage in other vital life history behaviors. See Christopher W. Clark et al., *Acoustic masking in marine ecosystems*, supra. The critically endangered North Atlantic right whale is particularly vulnerable to masking from anthropogenic sources, given the acoustic and behavioral characteristics of its calls. See *id.* Yet, NMFS provides no explanation of why acoustic masking would not have greater consequences for baleen whales, particularly the North Atlantic right whale.

Moreover, anthropogenic noise is already contributing to elevated ambient background noise in the Project area. See 87 Fed. Reg. 79,093. Under these conditions, the addition of even seemingly minor noise sources into the environment may shrink the available communication space to levels below what the species can sustain. NMFS’s failure to examine the additive effects of the Project on the available communication space of marine mammals thus ignores an important aspect of the problem. See *State Farm*, 463 U.S. at 43. This failure is rendered even more egregious by the fact that, as NMFS well knows, agency scientists collaborated in the development of models to quantify the impacts of actions on existing marine mammal communication space. See Leila T. Hatch et al., *Quantifying loss of acoustic communication space*; BOEM, *Gulf of Mexico OCS Proposed Geological and Geophysical Activities Draft Programmatic Environmental Impact Statement at App’x K (NMFS-directed study of cumulative and chronic efforts of geophysical surveys in the Gulf of Mexico)*.

#### D. The Proposed ITR Fails To Accurately Define The Environmental Baseline

The human-influenced marine environment exposes marine mammals to multiple stressors, including contaminants, vessel traffic, climate change impacts, and anthropogenic sound. As NMFS acknowledges in its Ocean Noise Strategy Roadmap, “there is a general recognition that the cumulative effects of multiple stressors may have a greater impact on individuals or species than a single stressor.” NMFS, *The NOAA Ocean Noise Strategy and Managed Species* 12



(2016). Relevant here, it is well-understood that anthropogenic sound from multiple sources can, when aggregated, have deleterious effects on marine mammals, even where the impacts from one of the sources alone may be minor. Indeed, the cumulative effects of anthropogenic noise have been “causally linked to population decline.” Joe Roman et al., *The Marine Mammal Protection Act at 40: Status, Recovery, and Future of U.S. Marine Mammals*, 1286 ANNALS N.Y. ACADEMY SCI. 29, 43 (2013). Anthony D. Hawkins & Arthur N. Popper, *A sound approach to assessing the impact of underwater noise on marine fishes and invertebrates*, 74 ICES J. MARINE SCI. 635 (2016).

There are currently 15 active IHAs for wind development activities in the proximate waters. Collectively, these 15 IHAs authorize, inter alia, the taking of 60% of the North Atlantic right whale population, 18% of the humpback whale population, and 15% of the harbor porpoise population. Put simply, the impacts of the Project will only further stress affected marine mammal populations. Indeed, when the estimated takes from the Project are added to the baseline established by the 12 active authorizations, as much as 162% of North Atlantic right whales could be subjected to take, as well as 25% of humpback whales and 18% of harbor porpoises. Yet, incredibly, at no point does NMFS purport to determine whether the Project, when added to those authorized activities, will have a negligible impact on marine mammals. Nor, for that matter, does NMFS meaningfully examine the Project’s effects in the context of any preexisting stressors in the area, such as the aggregate impacts of other sources of ocean noise (e.g., vessel traffic) or habitat disturbance. Instead, NMFS conducts the bulk of its negligible impacts analysis in a vacuum, masking the actual impacts of the Project and skewing the analysis towards the agency’s desired outcome. This approach fails to meet the agency’s legal obligations and is contrary to common sense and principles of sound science.

Although NMFS has resisted considering cumulative effects, the plain language of the MMPA requires that NMFS affirmatively determine that the take resulting from the proposed activity “will have a negligible impact” on marine mammals. 16 U.S.C. § 1371(a)(5)(A). Legally and logically, whether an action pushes a species across the threshold of “negligible” depends on both the magnitude of the species’ pre-existing status and the action’s additional impacts. Cf. *Nat’l Wildlife Fed’n v. NMFS*, 524 F.3d 917, 936 (9th Cir. 2008) (reaching the same conclusion in the analogous context of jeopardy determinations under the ESA). Significantly, NMFS agrees with this interpretation; in the preamble accompanying the incidental take regulations, the agency recognized that “[w]hile the impacts of a particular activity may be fairly minor, they may in fact be more than negligible when measured against a baseline that includes a significant existing take of marine mammals from the other activities.” 54 Fed. Reg. 40,338, 40, 342 (Sept. 29, 1989). Thus, NMFS “agree[d] . . . that the impacts of incidental take from successive or contemporaneous activities must be added to the baseline of existing impacts to determine negligible impact.” *Id.*

The proposed ITR purports to incorporate “the impacts of other past and ongoing anthropogenic activities” into its impact analyses as part of an “environmental baseline,” 87 Fed. Reg. at 79,148 (citing the preamble to the agency’s 1989 implementing regulations, 54 Fed. Reg. 40338 (Sept. 29, 1989)). However, NMFS provides a wholly deficient accounting of relevant ongoing stressors. For instance, NMFS fails to acknowledge the existence of active incidental take authorizations impacting the Project area and surrounding vicinity. As a result, NMFS considers

the impacts of the Project in isolation from other ongoing actions that are affecting the same marine mammal populations within the same geographic region. This approach does not pass muster under foundational administrative law principles. By considering the proposed ITR in a vacuum, NMFS deprives both the agency and the public of the context necessary to fully evaluate the effects of the Project on marine mammals before the agency commits to a course of action that could be precisely the kind of “proverbial straw in the camel’s back” that the MMPA was expressly designed to ensure against. See H.R. REP. NO. 92-707, at 15, 1972 U.C.C.C.A.N. at 4148; cf. *Grand Canyon Tr. v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002) (holding that the agency “cannot treat the identified environmental concern in a vacuum”).

The proposed ITR provides no support for its conclusion that, when considered in the context of other stressors, the proposed seismic surveys will have no more than a negligible impact on marine mammal species. Particularly for populations that are already experiencing significant stress, NMFS must incorporate into its analysis the full suite of expected impacts Project in the proper context—i.e., one that accounts for the current status of the affected species. Only then will NMFS be able to supply a reasoned basis for its determination of whether the Project’s impacts will in fact be negligible.

#### IV. THE PRECAUTIONARY PRINCIPLE PRECLUDES AUTHORIZING THE INTRODUCTION OF STRESSORS TO POPULATIONS UNDERGOING A UME

The proposed ITR proposes to authorize the take of three populations that are currently experiencing Unusual Mortality Events (“UME”): the North Atlantic right whale; the minke whale; and the humpback whale.

The North Atlantic right whale has been experiencing a UME since 2017. See NMFS, Unusual Mortality Event, *supra*. At least fifty-five right whale deaths or mortal injuries have been detected, forty-one of which were attributed to vessel strikes or entanglements. *Id.* However, due to cryptic mortality—defined as mortality that you do not see or document—those fifty-five whales represent only about 36% of observed whale carcasses. Draft Strategy at 6. Therefore, the actual number of right whale deaths since 2017 could be as high as 152 individuals.

UMEs are also ongoing for the Atlantic populations of minke whales (since January 2017) and humpback whales (since January 2016). See NMFS, 2017–2023 Minke Whale Unusual Mortality Event along the Atlantic Coast, <https://tinyurl.com/2uxmpv69>; NMFS, 2016–2023 Humpback Whale Unusual Mortality Event Along the Atlantic Coast, <https://tinyurl.com/t6vjm4x3>. Alarming, 59 minke whales have stranded between Maine and South Carolina from January 2017 to March 2019. Elevated numbers of humpback whales have also been found stranded along the Atlantic Coast since January 2016 and, in a little over three years, 88 humpback whale mortalities have been recorded (data through February 18, 2019), with strandings occurring in every state along the East Coast.

Although the precise causes are still under investigation, NMFS has cited human-caused mortality from vessel strikes as a contributing cause in all 3 UMEs. That all 3 species are experiencing significant die-offs in the same region further evidences that the marine ecosystem is under chronic stress, and further counsels against the rapid expansion of offshore wind

infrastructure and the concomitant increase in stressors to marine mammals from offshore wind development.

To authorize activities that introduce significant additional stressors to populations that are currently undergoing UMEs—particularly where the population is both depleted and declining, as is the case for the North Atlantic right whale—violates the spirit and intent of the MMPA. The MMPA reflected Congress’s concern that marine mammals “are, or may be, in danger of extinction or depletion as a result of man’s activities.” 16 U.S.C. § 1361(1). In the House Conference Report accompanying the MMPA, Congress observed that “when to these hazards,” including environmental contamination and degradation, overfishing, and harassment by boats, “there is added the additional stress of deliberate taking, it becomes clear that many marine mammals may indeed be in urgent need of protection.” H.R. REP. NO. 92-707, at 15, 1972 U.C.C.C.A.N. at 4147-48. Although “[m]an’s taking alone, without these factors, might be tolerated by animal species or populations, [] in conjunction with them, it could well prove to be the proverbial straw added to the camel’s back.” H.R. REP. NO. 92-707, at 15, 1972 U.C.C.C.A.N. at 4148. Here, the ongoing UMEs are having deleterious effects on the species’ viability and resilience. Yet, NMFS intends to push forward with authorizing substantial offshore wind development activities, including the Project, notwithstanding the active UMEs and in spite of the risks to these populations, one of which is highly imperiled. This course of action is misguided from a management perspective and legally flawed.

Congress has already weighed the interests of marine mammals against the interests of those who would exploit marine mammals and their environments for various reasons, and decided squarely in favor of prioritizing the animals. To that end, Congress built into the MMPA a conservative bias that was intended to prevent the taking of any “steps . . . regarding these animals that might prove to be adverse or even irreversible in their effects until more is known” regarding the causes of mortality and other threats. H.R. REP. NO. 92-707 at 15, 1972 U.C.C.C.A.N. at 4148. When considered against this backdrop, permitting the incidental take of North Atlantic right whales in the midst of a UME clearly flouts the MMPA’s “primary objective of [marine mammal] management,” which is “to maintain the health and stability of the marine ecosystem.” 16 U.S.C. § 1361(6). A UME is a clear indication that the ecosystem is, by definition, not in balance and in fact, is under extreme stress. It is simply not in accordance with this objective to issue a take authorization while that population is undergoing a UME. Nor is issuing such an authorization in accordance with the MMPA’s demand that marine mammal management decisions be made with caution and only after all of the relevant information has been gathered and analyzed to ensure that the removal of individuals will not have unintended or detrimental consequences. Considering the fact that the UME is ongoing and the causes of the UME—i.e., human interaction, specifically from entanglements or vessel strikes—show no signs of abating and in fact are only worsening, the introduction of additional significant stressors to a depleted, declining population is precisely the kind of “proverbial straw in the camel’s back” that the MMPA was expressly designed to ensure against. See H.R. REP. NO. 92-707, at 15, 1972 U.C.C.C.A.N. at 4148. Accordingly, NMFS is precluded from authorizing wind energy development in and around North Atlantic right whale, humpback whale, and minke whale habitat—at the very least—for the duration of the UMEs and until a recovery baseline can be assessed.

## V. NMFS MUST CONDUCT A PROGRAMMATIC ANALYSIS OF THE IMPACTS OF OFFSHORE WIND DEVELOPMENT

The proposed ITR requests “comment on . . . programmatic multi-action rule/LOA approaches,” including on the “potential marine mammal take impacts resulting from this and other related wind energy actions and possible benefits resulting from regulatory certainty and efficiency.” 87 Fed. Reg. at 79,160. It is clear that to best account for the impacts of the simultaneous development of multiple lease areas on marine mammals, including on the critically endangered North Atlantic right whale, programmatic review under the MMPA, ESA, and NEPA is required.

To date, BOEM and NMFS have conducted environmental reviews, impacts analyses, and formal consultation on a project-by-project basis, which has led to a segmented understanding of the impacts on marine mammals, inconsistent mitigation, and an underestimation of the extent of take (whether under the MMPA or ESA). A programmatic review of all ongoing and reasonably foreseeable future actions is essential to obtaining a holistic understanding of the impacts of offshore wind development.

With respect to the MMPA, programmatic review of offshore wind development comports with the statute’s command to determine whether incidental take resulting from “specified activity”—i.e., a group of actions with similar impacts—and taking place in “specified geographic area[s]” satisfies the small numbers and negligible impacts mandates. As explained above, NMFS’s failure to examine the additive impacts of offshore wind projects results in an underestimation of the effects of individual projects on marine mammals. programmatic review Indeed, if NMFS authorizes all 15 offshore wind developments currently under review, over the next 10 years, 265% of North Atlantic right whales could be taken, as well as 190% of humpback whales and 127% of harbor porpoises. This is untenable and fails to give effect to the language and intent of the MMPA. Programmatic review is necessary to avoid this absurd result.

In particular, the highly degraded baseline condition of the North Atlantic right whale merits careful consideration of whether the species can sustain the introduction of any new stressors. In analogous situations with populations undergoing precipitous declines, the Marine Mammal Commission has recommended establishing an annual limit on allowable take incidental to development and research activities. See, e.g., Letter from Rebecca J. Lent, Ph.D., Exec. Dir., Marine Mammal Comm., to Jon Kurland, Asst. Reg’l Admin. For Prot. Res., NMFS 6 (July 14, 2015) (recommending that “NMFS place annual limits on the number and types of takes [of Cook Inlet belugas] that are authorized for development and research projects, based on the most recent population estimate”). To establish a defensible, science-based limitation on take under the MMPA and ESA, NMFS must undertake a programmatic review of all of the ongoing and planned activities that will impact the species, in light of its current status. Such a review would be particularly timely given the climate-driven shifts in North Atlantic right whale habitat use that have been observed over the past decade. Additionally, this approach would also ensure that the efficacy of mitigation measures are considered at the same geographic and temporal scales as the impacts of such development.

With respect to the ESA, programmatic consultation under section 7(a)(2) would ensure that NMFS satisfies its mandatory duty to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species.” 16 U.S.C. § 1536(a)(2). During consultation, NMFS must first ascertain the baseline status of endangered species and then, after adding the effects of the proposed action to that baseline, determine whether the introduction of even seemingly minor stressors will cause the species cross the threshold into jeopardy. See *NWF*, 524 F.3d at 930 (defining “jeopardize,” i.e., “the action the ESA prohibits,” to mean “to ‘expose to loss or injury’ or to ‘imperil’”). Here, a programmatic consultation would require NMFS to consider the effects of all ongoing and planned activities impacting endangered marine mammals, and then determine whether those effects, when added to the baseline, would impede the species’ recovery or survival. Particularly considering the North Atlantic right whale’s severely degraded baseline condition, the value of a programmatic consultation process—i.e., one that ensures that even seemingly minor impacts from individual projects do not, in combination, drive the species to extinction—is laid plain.

Finally, with respect to NEPA, agencies are required to consider multiple actions together in a single programmatic EIS when those “actions are ‘connected,’ ‘cumulative,’ or ‘similar,’ such that their environmental effects are best considered in a single impact statement.” *Am. Bird Conservancy, Inc. v. FCC*, 516 F.3d 1027, 1032 (D.C. Cir. 2008) (quoting 40 C.F.R. § 1508.25(a)). Here, the expansion of offshore wind development plainly falls within the ambit of “similar” and “cumulative” actions within the meaning of NEPA, meaning that they must be considered together in a single programmatic EIS.

The expansion of offshore wind development is comprised of “similar” actions because each individual project, “when viewed with other reasonably foreseeable or proposed agency actions” both “have similarities that provide a basis for evaluating their environmental consequences together.” 40 C.F.R. § 1508.25(a)(3). These similarities are clear. The projects will introduce the same types of stressors into the offshore environment and will impact the same marine mammal populations. Accordingly, such actions are “similar” under NEPA. Offshore wind development projects likewise satisfy the definition of “cumulative” actions because they will “have cumulatively significant impacts.” 40 C.F.R. § 1508.25(a)(2). A cumulative impact is “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” *Id.* § 1508.7. Here, the installation of over 3,000 turbines in the offshore environment will have cumulative environmental impacts that should be taken into account in a single EIS. For example, because each project will introduce new sources of anthropogenic sound, each project will have additive effects on marine mammals, including by inducing new stressors, reducing communication space, and altering behavior and habitat. Accordingly, because the expansion of offshore wind development constitutes “similar” and “cumulative” action, its “environmental effects are best considered in a single impact statement,” *Am. Bird Conservancy*, 516 F.3d at 1032, and a programmatic EIS is the legally and practically appropriate way to accomplish this.

**VI: NMFS HAS IGNORED WELL-KNOWN SCIENCE BY DENYING SEISMIC SURVEYS CAUSE NO PERMANENT INJURIES.**

Prior to the US development of offshore wind, whale experts agreed that seismic surveys in the mid to low-frequency range can injure whales (Fernandez, 2005). Histologically the injuries resemble decompression illness (the bends). NMFS has not adequately considered the ability of mid-frequency sound to cause “rectified diffusion.” Rectified diffusion refers to a process where sound waves can directly cause gas bubbles in the bloodstream to coalesce and enlarge (Crum 1996). As gas bubbles enlarge, they can damage tissue. An absence of evidence does not mean evidence of absence. The burden of proof is on NMFS, not on the public. NMFS must prove, with evidence, that the seismic surveys have not caused injury. The NMFS must provide evidence that no association exists, otherwise, we must assume that the offshore wind activity has contributed to these deaths.

## CONCLUSION

For the foregoing reasons, the proposed ITR and related documents are legally deficient. If NMFS nonetheless proceeds to finalize the ITR, it will be doing so in clear violation of federal environmental law. In lieu of taking that step, Green Oceans urges NMFS to withdraw the proposed ITR and immediately engage in a programmatic review of offshore wind development under the MMPA, the ESA, and NEPA.

Elizabeth Quattrocki Knight, M.D., Ph.D.  
President, Green Oceans

July 10, 2023



*Responsible Offshore Development Alliance*

July 13, 2023

Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service

**Re: Takes of Marine Mammals Incidental to Specific Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys in the New York Bight; Docket No. RTID 0648-XC889.**

*Submitted electronically via email to ITP.Esch@noaa.gov*

Dear Ms. Harrison,

The Responsible Offshore Development Alliance (RODA) submits the following comments regarding the request from Ocean Wind II, LLC (Ocean Wind II) for authorization to take marine mammals incidental to marine site characterization surveys offshore of New Jersey.<sup>1</sup> In Lease Area OCS-A 0532 and associated export cable routes to landfall locations in New Jersey. These comments, while responsive to Ocean Wind II's request to take marine mammals; are also directed toward others under requests (authorized or proposed) in support of offshore wind energy (OSW) off the East Coast of the U.S.

RODA is a national coalition of independent fishing businesses, associations, companies and community members committed to ensuring the compatibility of potential new offshore developments with their businesses. Members of our coalition operate in federal and state waters and shoreside throughout the New England, Mid-Atlantic, and Pacific coasts.

**A better planned approach is needed**

Since May 1, 2023, there have been a multitude of public comment opportunities for several requests for Incidental Harassment Authorizations (IHA) to take marine mammals incidental to marine site characterization surveys **and** several requests for Letters of Authorizations (LOA) and Incidental Take Regulations to take marine mammals incidental to activities related to construction activities. This in addition to a number of public comment opportunities published by the Bureau of Ocean Energy Management (BOEM) related to the offshore wind development process.

---

<sup>1</sup> 88 Fed Reg 38491 (June 13, 2023)

While BOEM and NMFS fall under different Departments within the Federal Government, better coordination between the two Agencies would serve the public and the fulfillment of each Agencies' respective duties better. Some of the materials included within the IHAs and LOAs are technical. Lacking sufficient time to carefully analyze those materials will impact the quality and quantity of comments received on these important proposed actions. Given the sheer number of marine mammal takes proposed in support of OSW, the federal government is doing stakeholders, the public, and those marine mammals which stand to be impacted, a disservice.

**To the extent possible, NMFS should better plan publication of requests for IHAs and LOAs to better enable the interested public an opportunity to meaningfully participate. NMFS and BOEM should coordinate public comment opportunities relevant to offshore wind actions and activities to not over-burden the public in support of more informed decision-making by the Agencies.**

### **Concerns about offshore wind development's impacts on protected resources**

Fishermen and the public are extremely concerned about potential impacts to protected resources arising from the construction of offshore wind energy (OSW) facilities. We have submitted numerous comments expressing the fishing industry's concerns regarding the process for authorization of marine mammal takes in OSW activities, particularly: (1) in contrast to the strict regulations for marine mammal harassment and takes applied to the fishing industry; and (2) authorizations that are segmented throughout OSW project phases without a cumulative, holistic analytical approach. As you know, many Atlantic fisheries are severely constrained by regulations designed to minimize North Atlantic right whale (NARW) and other protected resource interactions, and any increase in take or harassment of these species will very likely result in further impacts to fishing operations.

Beginning in January of this year, elected officials called for an immediate moratorium on development until scientists can assure the public that OSW activities do not pose threats to whales.<sup>2</sup> On May 23rd, fifty east coast mayors sent an open letter to Congress calling for an offshore wind development moratorium in light of recent marine wildlife deaths.<sup>3</sup> Environmental groups are calling for a federal probe to better understand the recent whale deaths in the region.<sup>4</sup>

---

<sup>2</sup> See [https://chris-smith.house.gov/uploadedfiles/2023-01-30\\_letter\\_to\\_secretary\\_raimondo.pdf](https://chris-smith.house.gov/uploadedfiles/2023-01-30_letter_to_secretary_raimondo.pdf) ;  
<https://vandrew.house.gov/media/press-releases/congressman-van-drew-demands-all-offshore-wind-activity-end-immediately-until-and>  
<https://www.msn.com/en-us/news/us/republican-demands-nj-gov-murphy-halt-offshore-wind-project-for-30-60-days-amid-spate-of-whale-deaths/ar-AA1baC0d>

<sup>3</sup> See <https://www.msn.com/en-us/news/us/50-blue-state-mayors-call-for-offshore-wind-moratorium-amid-whale-dolphin-deaths/ar-AA1bDkji>

<sup>4</sup> See [https://cleanoceanaction.org/fileadmin/editor\\_group1/Issues/Wind/Updated\\_Biden\\_Letter\\_and\\_IHA\\_Factsheet\\_Demanding\\_investigation\\_of\\_dead\\_whales.pdf](https://cleanoceanaction.org/fileadmin/editor_group1/Issues/Wind/Updated_Biden_Letter_and_IHA_Factsheet_Demanding_investigation_of_dead_whales.pdf)



This necessarily requires full necropsies, conducted by an independent body, on any marine mammals which strand in the area and the release of those findings to the public. With increases in strandings coinciding with activities in support of OSW development, the public is rightly concerned and asking questions. At a minimum, NMFS should soberly consider if additional authorization for Level A and B takes should be permissible given the current circumstances.

There are two active Unusual Mortality Events (UME) for whales in the Atlantic region: the Atlantic Humpback Whale and the NARW.<sup>5</sup> There is also a non-active UME, pending closure, for the Atlantic Minke Whale.<sup>6</sup> As of May 19, 48 large whales have washed up on the Atlantic Coast since Dec. 1. A co-founder and ex-president of Greenpeace recently was quoted as saying, “[d]rilling foundations for offshore wind turbines and sound pulses used to prepare for the 900-foot towers may be creating a ‘death zone’ for whales.”<sup>7</sup> There is no conclusive evidence that recent whale and other marine mammals deaths off the Atlantic Coast are related to activities supporting offshore wind (OSW) development; but similarly, there is no conclusive evidence that finds such activities are not a contributing factors. NMFS must diligently consider if authorization of additional harassment activities should be allowed, given the recent mortalities, UMEs, and lack of a definitive answer regarding the role that OSW is playing in those mortalities. BOEM and NMFS are in the press offering carefully worded statements absolving the OSW industrial machine from any responsibility in the strandings and deaths. The absence of evidence is not evidence of absence. As suggested above, requiring and conducting timely necropsies on all dead or stranded marine mammals would provide us and the concerned public some much needed answers.

On May 12, a news story was published noting that “CIP and Avangrid JV Vineyard Wind is to deploy and test a secondary bubble curtain during foundation installation for the 800 MW offshore wind project.”<sup>8</sup> The bubble curtain is intended to “absorb and dampen sound during foundation installation”. This begs the question, if sound was not an issue why is there a need to absorb and dampen it?

### **Categorical Exclusion under NEPA**

NMFS has determined the issuance of the proposed IHA qualified to be categorically excluded from further NEPA review. As rational for this determination, NMFS cites reference number B4

---

<sup>5</sup> See <https://www.fisheries.noaa.gov/national/marine-life-distress/active-and-closed-unusual-mortality-events> (Accessed July 11, 2023).

<sup>6</sup> A female minke whale was found dead in Newford Harbor on Sunday, July 2nd. See - <https://www.yahoo.com/entertainment/female-minke-whale-found-dead-130327249.html>

<sup>7</sup> See <https://nypost.com/2023/05/08/not-unreasonable-to-link-whale-deaths-offshore-wind-farm-work-ex-greenpeace-chief-says/> (Accessed July 11, 2023)

<sup>8</sup> See - <https://renews.biz/85711/vineyard-wind-to-trial-secondary-bubble-curtain/>.

in Appendix E of the Companion Manual for NOAA Administrative Order 216–6A (Companion Manual).<sup>9</sup>

Section 4 of the Companion Manual discusses Categorical Exclusion and provides a three-prong test identifying when a Categorical Exclusion may be applied to a proposed action:

- a) the proposed action falls within one of the categories listed in Appendix F (sic) of this Manual;
- b) the proposed action is not part of a larger action, and can therefore be reviewed independently from other actions under NEPA; and
- c) there are no extraordinary circumstances that may require further analysis in an EA or EIS.<sup>10</sup>

An argument can be made that allowing takes of marine mammals in support of OSW activities would fail (b) and (c). Ocean Wind II holds a Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (OCS) of the East Coast of the U.S. As of May 4, 2023, there were 26 other similar leases off the east coast. Each of the lessees has or will seek authorizations to take marine mammals incidental to its assessment and development of those lease sites. As will be more fully developed below, a significant number of marine mammals will be subject to take in support of OSW development. Viewed on its own, Ocean Wind II's request to take 2,846 marine mammals incidental to marine site characterization surveys offshore of New Jersey may seem reasonable. However, when you consider the 26 other lessees have or will submit similar requests to take the same species, with similar mitigation strategies, it is arguable that Ocean Wind II's request is part of a larger action - furtherance of OSW development - and should be reviewed in tandem with those other actions.

Described above are two factors which could qualify as extraordinary circumstances requiring further analysis: (1) the ongoing UME for Atlantic Humpback Whale and the NARW; and (2) the significant number of cetaceans which have stranded on East Coast beaches since December 1.

**Given the above, NMFS should reevaluate its determination that the proposed IHA qualifies to be categorically excluded from further NEPA review. NMFS should conduct a thorough analysis of potential impacts to protected species during all phases of OSW development - site characterization and assessment, construction, operations, and decommissioning. The piecemeal approach perfected by BOEM should be viewed skeptically by NMFS as it**

---

<sup>9</sup> See page E2 of

<https://www.noaa.gov/sites/default/files/2021-10/NOAA-HQ-2016-0145%20NAO%20216-6A%20Companion%20Manual.pdf>

<sup>10</sup> See - page 4 of

<https://www.noaa.gov/sites/default/files/2021-10/NOAA-HQ-2016-0145%20NAO%20216-6A%20Companion%20Manual.pdf>

**relates to impacts of OSW developments on protected species and others dependent on healthy, functioning, ecosystems.**

### **Lack of Cumulative Effects Analysis and Segmented Process**

The request finds the proposed authorized takes represent small numbers of marine mammals relative to the affected stock abundances. But when one looks at **ALL** takes proposed in support of OSW activities, that is not the case. On June 8, 2023 NMFS published a request from Park City Wind, LLC (Park City) for Incidental Take Regulations (ITR) and an associated Letter of Authorization (LOA) to take marine mammals incidental to construction of the New England Wind Project.<sup>11</sup> That request, alone, covers 32.8% of the total population of the critically endangered NARW, 24.8% of Humpback whales, 23.9% of Common dolphin, and 16.1% of both Gray and Harbor seals.<sup>12</sup> So while the request for Ocean Wind II may result in take small numbers of marine mammals, the same cannot be said for the cumulative impacts on marine mammal stocks for activities in support of OSW.

Every phase of the OSW development process has the potential to impact marine mammals and other protected species. Each of the activities associated with pre-construction surveys, construction, operations, monitoring surveys, and decommissioning will require some type of permit or authorization for interactions with protected species. To our knowledge, there are no resources easily accessible to the public to understand what authorizations are required for each of these activities. This is detrimental not only to having a well-informed public who are then asked to provide comment and input, but suggests a lack of cumulative perspective of OSW development activities from numerous projects to and on our protected resources. We recommend NMFS improve the transparency of this process and move away from a segmented phase-by-phase and project-by-project approach to takes of marine mammals by either Incidental Harassment Authorizations (IHAs) or LOAs. The fishing industry has asked for a comprehensive list/table of all Level A and Level B takes under currently approved Authorizations per project, as well as Level A and Level B takes per project being requested in all Authorization applications currently under review. Using the list provides by NMFS on the Incidental Take Authorizations for Other Energy Activities (Renewable/LNG) webpage<sup>13</sup>, we believe that information to be the following:

#### **All Currently Authorized Activities:**

- 137,835 marine mammals subject to Level B harassment.

---

<sup>11</sup> 88 Fed Reg. 37606 (June 8, 2023).

<sup>12</sup> Id @ Table 34 (pg 37664 - 37665)

<sup>13</sup> See -

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable> (Accessed July 9, 2023)

- This includes 230 NARW and 402 Humpback whales; both of which are experiencing an active UME.
- 122 marine mammals subject to Level A harassment.
  - This includes 0 NARW and 14 Humpback whales. As will be more fully developed below, it is illogical for an applicant to seek Level A takes for ALL other marine mammals they will be harassing with Level B takes except the NARW.

#### All Proposed and Unauthorized Activities<sup>14</sup>

- 507,355 marine mammals subject to Level B harassment.
  - This includes 766 NARW and 2,055 Humpback whales; both of which are experiencing an active UME.
- 1,188 marine mammals subject to Level A harassment
  - This includes 0 NARW and 57 Humpback whales.

Under currently authorized and proposed IHA/LOA requests submitted to NMFS to support OSW development a combined total of 631,034 whales, dolphins and pinnipeds will be subjected to Level B harassments. Another 1,507 will be subjected to Level A takes.<sup>15</sup> While there are no requests for Level A takes on the critically endangered NARW, there are 996 requests for Level B harassment. As of October of last year, there were an estimated 340 NARW in existence. In support of OSW activities, NMFS will permit/authorize each NARW to be harassed more than 2 times. This information points to the need to take a stark look at permissible incidental takes for marine mammals from OSW development, and that a cumulative approach is absolutely paramount.

#### Right Whale Abundance Adjacent to the Project Area

The location of the OCS-A 0532 lease is in an area that overlaps a migratory corridor biologically important area (BIA) for NARWs. With over one third of the current population, including up to 30 percent of known calving females, visiting the RI and MA Lease Areas between 2010 and 2015,<sup>16</sup> safe passage through any wind energy area must be assured.

---

<sup>14</sup> Includes all proposed activities through the IHA request submitted by Atlantic Shores Offshore Wind Bight, LLC which was published in the Federal Register on June 28, 2023.

<sup>15</sup> We acknowledge there are some duplication for projects which have a current IHA and have reapplied for IHAs with different take requests. For example, on June 28, Atlantic Shores Offshore Wind Bight LLC, submitted a request for authorization to take marine mammals incidental to marine site characterization surveys offshore of New Jersey and New York. In 2022, NMFS issued a similar IHA to Atlantic Shores. The current IHA allows for the take of 2,325 marine mammals while the June 28 request seeks authorization to take 2,148.

<sup>16</sup> Vineyard Wind SEIS, p. 3-127.

When describing potential impacts to a mammal's feeding behavior, the notice states, “[f]eeding behavior is not likely to be significantly impacted as prey species are mobile and are broadly distributed throughout the survey area; therefore, marine mammals that may be temporarily displaced during survey activities are expected to be able to resume foraging once they have moved away from areas with disturbing levels of underwater noise.” NARWs must locate and exploit extremely dense patches of zooplankton, specifically, high concentrations of a lipid-rich copepod (*Calanus finmarchicus*), to feed efficiently, and these dense patches are likely a primary characteristic of the spring, summer, and fall right whale habitats within the region. While feeding behavior may not be significantly impacted, it is likely that efficient feeding may be. Given the small population of NARWs, it is crucial that potential impacts to this population be fully considered before IHA issuance. Scientists agree that the loss of even one more breeding female whale would be catastrophic to the population.

### **Increased Uncertainty for Marine Mammal Surveys**

The Bureau of Ocean Energy Management (BOEM) has previously determined that the effects on survey aerial coverage for marine mammals, including the North Atlantic Right Whale (NARW), will substantially impact NMFS' ability to continue using current methods to fulfill its mission of precisely and accurately assessing protected species. This will result in an unacceptable level of uncertainty in protected resource management. It will also potentially result in an event that may otherwise be a “harassment” event become a mortality event, if entanglement response is delayed, hampered, or made impossible and injured whales cannot be rescued. So too is the cessation of NMFS protected resource surveys a threat to climate science itself; assessment of protected resource and fish stocks over long time series is a key factor in understanding ecosystem health, function and shifts and responses to climate change.

### **Concerns Regarding Treatment of Whales in OSW Permitting**

A major concern is the high amount of increased vessel traffic associated with offshore wind development throughout the region in areas transited or utilized by certain protected resources. BOEM has also estimated that construction of each future OSW project would require an additional 25-46 vessels per project operating in the proximal geographic area at any given time, and that up to four projects would be under construction at the same time in the next few years.<sup>17</sup> This large increase in traffic would greatly increase the risk of ship strike to protected species, including endangered whales. NMFS has stated that slowing down vessel traffic and reducing ocean noise, as well as reducing risks of entanglements are key to regulation and management plans. However, vessel speed restrictions are not fully mandated or enforced for OSW vessels.

Additionally, associated increases in vessel noise could contribute to the suite of ongoing

---

<sup>17</sup> Vineyard Wind SEIS, p. 3-111.

stressors impacting the NARW population. Noise has been found to interfere with right whale communication and increase their stress levels. In turn, “females that undergo energetic stress from reproduction may be more susceptible than males to dying from chronic injuries such as those from entanglement or vessel strikes.”<sup>18</sup> Noise from human activities, such as that which would occur with activities associated with wind energy installation and operation of the proposed project, can disrupt normal behavior of NARWs and may further reduce their ability to identify physical surroundings, find food, navigate, and find mates. In a letter to BOEM dated May 13, 2022, the Chief of Protected Species of NOAA’s Northeast Fisheries Science Center noted “[t]he development of offshore wind poses risks to” the NARW.<sup>19</sup>

The Marine Mammal Commission (MMC) has raised several concerns on other proposed authorizations for OSW development. As they are more knowledgeable on impacts of pile driving and acoustics to marine mammals, we defer to their expertise and recommend NMFS fully review the concerns they identify in their public comments.<sup>20</sup> In particular, MMC cites poor analyses such as underestimation of harassment takes from impact and vibratory pile driving, noise, insufficient and incomplete monitoring measures and reporting requirements. As identified, those issues may result in costly closures or strict management restrictions for fisheries. We urge NMFS to use the best available science including the most comprehensive models for estimating marine mammal take and developing robust mitigation measures.

On September 9, 2020, seventeen environmental NGOs submitted a public comment letter outlining several concerns and recommendations related to the IHA for site characterization surveys required for OSW projects. Many of the items raised can be extended to LOA request reviews. Again, we defer to their expertise but echo their concerns regarding: a) the lack of sufficient data and observations of NARWs and other protected species in areas under for considerations for OSW development and associated cable routes that are not sufficiently described by the models used by NMFS, b) the failure to take a cumulative look at take and harassment as there are numerous areas to be developed and each project will submit an IHA and LOA, c) the untested proposed mitigation and insufficient monitoring measures intended to minimize impacts to protected species, and d) no long term monitoring plans for marine mammals and protected species. This coalition provided concrete recommendations for improving mitigation measures for surveys, including: (1) incorporate additional data sources including real-world observational data into calculations of marine mammal density and take; (2) not adjust take numbers downward for large whales based on unproven mitigation measures; (3) require mitigation measures that meet the least practicable adverse impact standard; and (4) strengthen its vessel speed restrictions. We urge NMFS to ensure that each of these important

---

<sup>18</sup> See <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale>.

<sup>19</sup> See - [https://newbedfordlight.org/wp-content/uploads/2022/11/UR1-2023-000009\\_10\\_17\\_2022.pdf](https://newbedfordlight.org/wp-content/uploads/2022/11/UR1-2023-000009_10_17_2022.pdf). (Accessed Feb 10, 2023)

<sup>20</sup> RODA has cited these comments in previous comment letters.

topics raised by whale experts are fully addressed.

### **Fishermen Will be Affected by Protected Resource Take**

Negative impacts to local fishermen and coastal communities as a result of a potentially adverse impact to marine mammals (e.g. vessel strike resulting in death or severe injury) are not mentioned nor evaluated in the IHA request for this project, and should be included in a comprehensive analysis. The lack of an adequate analysis of individual and cumulative impacts to these protected mammal species is concerning, given that fishermen are already highly restricted in their ability to harvest due to NARWs protections.

The entire fishing industry pays the price to protect highly migratory NARWs, not just those closest to the project area. An impact to NARWs off the South Atlantic will result in impacts to fisheries in Maine, impacts in Cape Cod Bay impact fishermen in Southern New England, and so on. These reverberating impacts are not addressed in this request.

### **Robust Mitigation and Clarified Accountability Measures**

RODA is appreciative of the efforts OSW developers, NMFS, and others have conducted to develop and adopt mitigation measures in order to minimize construction impacts to marine mammals. However, the adequacy of these measures, as all information provided to the government by interested private parties, requires robust independent review. For example, multiple studies exist suggesting that Passive Acoustic Monitoring (PAM) has limited success in detecting NARWs due to their infrequent vocalization. The effectiveness of visual observation in detecting NARW is similarly uncertain, particularly since at-sea conditions rarely meet ideal standards (i.e. crew breaks, rough seas, location of spotter vessels, low light, or other factors that limit visual detection). We encourage NMFS to evaluate the proposed IHA with utmost care, utilizing the best available science.

Mitigation measures in this IHA request include marine mammal shutdown zones, specific to the activity and marine mammal present in the project area and while transiting. For the NARW, the shutdown zone is 500 meters. Even in the most favorable weather conditions, it can be difficult to spot a whale when it is roughly a third-of-a-mile away. In inclement weather, this can be much more so. Because observations will determine if survey activity may commence and/or continue in these zones, further clarification should be included in the IHA that explicitly states if weather or other conditions that limit the range of observation, shutdown zones will be initiated.

Fundamental questions still remain regarding what happens if harm exceeds the threshold under the proposed IHA, or any forthcoming LOAs: what can be done if take or harassment surpasses expected levels? Can a project realistically stop mid-construction or mid-operation after taxpayers have spent billions of dollars on its development? Fisheries are subject to accountability measures by law – up to and including cessation of all activity – if

scientifically-based catch limits are exceeded. What accountability measures will apply to ensure that OSW developers are likewise responsible for their own impacts, and the burdens of those are not also assigned to fishermen, should they occur?

### **Potential Renewal of this Proposed IHA**

It is premature to offer an opinion on whether NMFS should issue a one-time renewal IHA following notice to the public. The conditions outlined in the request focus on activities proposed by Ocean Wind II. As noted above, there are significant concerns about the impacts of site survey activities on marine mammals. A one-time renewable may be appropriate if:

- Necropsies are performed on all deceased marine mammals (stranded or at sea); and those necropsies definitively find no sign of injury, deafness, etc that could be attributable to activities in support of OSW;
- A complete understanding and analysis of the cumulative impacts on marine mammal species from ALL activities in support of OSW on the OCS off the Atlantic coast is undertaken; and
- Ocean Wind II has not exceeded any of the requested takes

\*\*\*

The fishing industry wants to see the protection of marine mammals and protected species and thus ask that NMFS consideration of IHAs and LOAs for offshore wind developers be applied equitably across industries. First and foremost, we must protect the marine ecosystems upon which we all rely. Secondly, the OSW industry must be accountable for incidental takes from construction and operations separately from the take authorizations for managed commercial fish stocks. Lastly, there must be a clear IHA threshold for OSW activities regionally and across project phases. With dozens of projects conducting surveys, construction, operation, and decommissioning now and in the next 30+ years, there appears to be no forward-looking plan to address all this new activity that poses a threat to marine mammals and protected species.

Thank you for your consideration of these comments.

Sincerely,



Lane Johnston, Programs Manager



Mike Conroy, West Coast Director  
*Responsible Offshore Development Alliance*



Email 7/8/2023 to ITP.Esch@noaa.gov

Incidental Take Authorization: Ocean Wind II Marine Site Characterization Surveys Off New Jersey

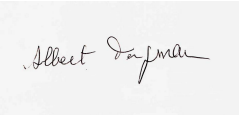
Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources,  
National Marine Fisheries Service

**Incidental Take Authorization: Ocean Wind II Marine Site Characterization Surveys Off New Jersey**

I strongly object to the project and the taking of marine mammals for this project, the supporting material from the applications lists over 100's of harassment and takes. NOAA needs to evaluate the applications in their totality from all projects to get a true representation of the impact of approving these permits one by one. Doing it piecemeal seriously runs the risk of eliminating an endangered species from our ocean. Since the lease areas are known, I urge NOAA Fisheries to undertake a study to estimate all the permits to be potentially submitted for all the planned offshore wind projects and evaluate the cumulative impact of all the permits. The study should take into account **ALL** the takes and harassments to be potentially brought in front of the agency. Also all survey work and related activities should be fully studied as part of a new EIS for the project or as a separate EIS for the survey work to assess the impact on the environment and marine life. Doing anything else is irresponsible and gambling with an unprecedented experiment in our ocean.

I attach several charts which although NOAA fisheries might determine are not conclusive but are enough to say "there's smoke here, we need to find the fire".

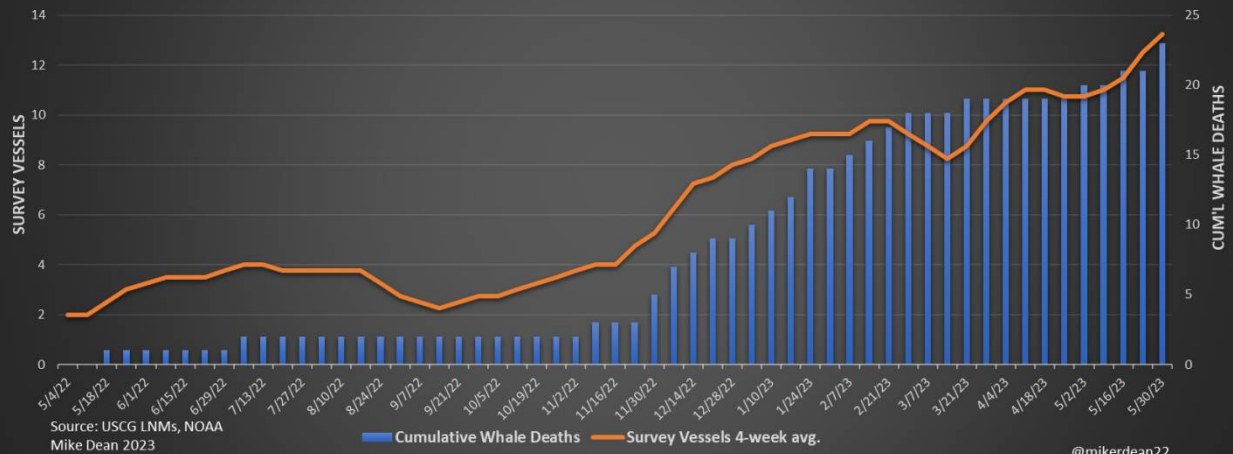
Warm regards,

A handwritten signature in black ink on a light gray rectangular background. The signature reads "Albert Torjman" in a cursive script.

Albert Torjman  
Margate NJ 08402

## Whale Deaths / Offshore Wind Survey Vessels NJ/NY

May 2022 - 2023



MARINE MAMMAL SPECIES	TOTAL STOCK SIZE OF SPECIES	TOTAL OF ALL INCIDENTAL TAKES	TOTAL % OF STOCK SIZE
<b>WHALES – Mysticetes (Balena)</b>			
Fin Whale, Endangered	6,802	2,478	36%
North Atlantic Right Whale, Endangered	338	710	210%
Sei Whale, Endangered	6,292	341	5%
Blue Whale, Endangered	412	29	7%
Sperm Whale, Endangered	4,349	429	10%
<b>TOTAL Endangered Whales</b>	<b>18,193</b>	<b>3,983</b>	<b>22%</b>
<b>OTHER WHALES</b>			
Humpback Whale	1,395	1,981	142%
Minke Whale	21,968	4,787	22%
Dwarf Sperm Whale	4,548	8	0%
Pygmy Sperm Whale	7,752	14	0%
Cuvier's Beaked Whale	Unknown	14	-%
Barnville's Beaked Whale	5,500	8	0%
Gervais' Beaked Whale	Unknown	8	-%
Sowerby's Beaked Whale	Unknown	8	-%
True's Beaked Whale	Unknown	8	-%
Northern Bottlenose Whale	Unknown	12	-%
Mesoplodont Whale	Unknown	18	-%
<b>TOTAL WHALES</b>	<b>77,548</b>	<b>10,843</b>	<b>14%</b>
<b>DOLPHINS – Odontocetes</b>			
Atlantic Spotted Dolphin	39,921	31,109	78%
Atlantic White-Sided Dolphin	93,233	15,974	17%
Bottlenose, Offshore Dolphin	62,851	29,415	47%
Bottlenose, Coastal Dolphin	6,639	10,469	158%
Bottlenose, Offshore & Coastal Dolphin	69,490	50,196	72%
Cymene Dolphin	4,237	14	0%
Short-Beaked Common Dolphin	172,974	207,792	120%
Pygmy Killer Whale	Unknown	10	-%
Killer Whale	Unknown	10	-%
False Killer Whale	1,791	33	2%
Fraser's Dolphin	Unknown	38	-%
Mexican-Headed or Little Killer Whale	Unknown	239	-%
Pantropical Spotted Dolphin	6,593	260	4%
Long-finned Pilot Whales	39,215	2,816	7%
Short-finned Pilot Whales	1,481	1,916	97%
Risso's Dolphin	35,215	1,654	5%
Plough-Toothed Dolphin	4,833	248	5%
Striped Dolphin	67,039	129	0%
White Beaked Dolphin	536,018	150	0%
<b>TOTAL DOLPHINS</b>	<b>1,142,045</b>	<b>353,038</b>	<b>31%</b>
<b>PORPOISES</b>			
Harbor Porpoise	95,543	21,491	22%
<b>SEALS – Pinnipeds</b>			
Gray Seal	37,300	31,164	114%
Harbor Seal	61,336	52,460	86%
<b>Art Gager</b>	Unknown	10,983	-%
<b>TOTAL SEALED SPECIES</b>	<b>98,636</b>	<b>84,607</b>	<b>86%</b>
<b>TOTAL ENDANGERED SPECIES</b>	<b>18,193</b>	<b>3,983</b>	<b>22%</b>

This is the latest TOTAL of ALL inci... See more



itp esch - NOAA Service Account &lt;itp.esch@noaa.gov&gt;

---

**Ocean Wind II, LLC (Ocean Wind II) for authorization to take marine mammals incidental to marine site characterization surveys offshore of New Jersey**

1 message

---

**Elizabeth Gannon** <egannon63@gmail.com>

Sat, Jul 8, 2023 at 8:19 PM

To: ITP.Esch@noaa.gov

Attn: Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

I would like to make a public comment regarding the above-mentioned take authorization request made by Ocean Wind II. I request that my comment be added to the official record regarding this take authorization request.

I am opposed to this request, on the basis that yet again, thousands of marine mammals are being put at risk, will be harassed as a result of man-made activities being introduced to their environment, and may possibly die as a result of this interference. I would like to know if NOAA is keeping a list of the numbers of each species you are authorizing to be harrassed and possibly killed by "energy" projects, as well as any other kind of take authorizations you are approving, for activities other than "energy" projects. Every time NOAA authorizes these takes requests, you are doing the opposite of protecting marine mammals and the entire marine ecosystem. You are endangering the fish and marine mammals and birds that you are supposed to be protecting.

Please ensure that my voice is heard. Someone needs to speak for these creatures, because NOAA is condemning them to death.

Thank you,

Elizabeth Gannon

[egannon63@gmail.com](mailto:egannon63@gmail.com)



itp esch - NOAA Service Account &lt;itp.esch@noaa.gov&gt;

---

## Ocean Wind II Public Comment

1 message

---

ty1ash2@aol.com <ty1ash2@aol.com>  
To: "ITP.Esch@noaa.gov" <ITP.Esch@noaa.gov>

Mon, Jul 10, 2023 at 11:23 AM

Jolie Harrison, Chief, Permits and Conservation Division  
Office of Protected Resources, National Marine Fisheries Service

Dear Ms Harrison,

Orsted's Ocean Wind II is requesting an incidental harassment authorization ("IHA") to "take" or "harass" 16 different endangered and protected marine mammal species while conducting high-resolution geophysical (HRG) marine site characterization surveys up and down the NJ shore and offshore, as well as in Raritan and Delaware Bays. The equipment being used can be harmful to marine life; hence, the need for federal authorization to harm these protected species.

This permit request should not be granted for the above reason. To date, all marine mammal deaths are still waiting on full necropsy reports. No further action should be allowed until studies have been completed and results of the necropsies are published. Our coast cannot afford any more casualties for a project that is not beneficial to the ocean's fragile ecosystem. Since December 2022 there has been a 165% increase in whale, dolphin & porpoise deaths. Therefore, I implore you that this permit is not granted.

Sincerely,

Tom Littwin



itp esch - NOAA Service Account &lt;itp.esch@noaa.gov&gt;

---

**Ocean Wind 2**

1 message

---

**lockwood10@comcast.net** <lockwood10@comcast.net>  
To: ITP.Esch@noaa.gov

Thu, Jul 13, 2023 at 5:22 PM

To: Jolie Harrison, Chief Permits and Conservation Division, Office of Protected Resources, NMFS

I am respectfully writing in opposition to authorizing any more Incidental Harassment Authorizations for offshore wind development, specifically for Ocean Wind 2, LLC. The below link to NOAA's list of in process, active, and expired authorizations have exceeded reasonable "small" amounts of marine life being harassed. There is no best available science for the current seismic surveys being used, and there have been 52 whale deaths acknowledged by NOAA to date since December 2022. They are our best natural defense to climate change. These numbers do not include those we will never see documented. Issuing additional authorizations will likely push North Atlantic Right Whales to extinction.

The attached Synthesis of Science paper acknowledges "major gaps in knowledge" as to the adverse effects of these projects for multiple areas and until further research is conducted, this work should not be authorized any further.

The laws designed to protect endangered and protected species are being ignored and broken. Someone must stand up for the health of our oceans and marine life. What is being done is criminal. There are other options with less adverse impacts.

[Incidental Take Authorizations for Other Energy Activities \(Renewable/LNG\) | NOAA Fisheries](https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable)


<https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable>


Sylvia Lockwood


Cape May Court House, NJ


---


**8 attachments** **1-50.pdf**  
OK


 **51-100.pdf**  
OK


 **101-150.pdf**  
OK

 **151-200.pdf**  
OK

 **201-250.pdf**  
OK

 **251-300.pdf**  
OK

 **301-350.pdf**  
OK

 **351-388.pdf**  
OK



itp esch - NOAA Service Account &lt;itp.esch@noaa.gov&gt;

---

**Atten. Jolie Harrison, Chief, Permits, Conservation Division**

1 message

---

**Toni O'Connell** <toni@capeislandsrealty.com>  
To: "ITP.esch@noaa.gov" <ITP.esch@noaa.gov>

Sat, Jul 8, 2023 at 8:41 AM

Good morning Jolie,

I am writing to you as a concerned, Citizen of North Wildwood, New Jersey. I'm asking you to please do not issue any more permits and to stop the level B harassment of 2,856 Marine Mammals for Marine Site Characterization Surveys for "Orsted's Wind II" Offshore Wind Project, off NY/NJ. Too many mammals have perished due to these surveys. Please do not let them hurt/ kill any more of them until independent studies of each and every one can prove that they have not died because of ship strikes due to their sonar capabilities being damaged. There are still too many pending necropsies and no answers, to justify authorizing any more takes. Please let your conscience be your guide.

Thank you,

Toni O'Connell  
[210 E 2nd Ave](#)  
[North Wildwood, NJ 08260](#)  
609-364-5130 cell

Get [Outlook for iOS](#)



itp esch - NOAA Service Account &lt;itp.esch@noaa.gov&gt;

---

**Regarding Docket No. RTID 0648-XC889 (6/13/2023)**

1 message

---

**Donna Repoli** <repolidonna@gmail.com>  
To: ITP.Esch@noaa.gov

Tue, Jul 11, 2023 at 7:24 AM

My name is Donna Repoli, and I am from Ocean County, New Jersey. I am a Stockton University alumni with a degree in marine science, with a concentration in marine and wildlife biology. I am also a member of Clean Ocean Action, an organization headquartered in Long Branch, New Jersey, with a mission to protect and preserve our valuable marine habitats and conserve marine wildlife.

I am absolutely appalled that it is deemed acceptable to "take" any amount of endangered, protected marine mammals for the sake of a renewable energy technology, when we are not yet entirely sure of the ecological consequences. We have been experiencing unprecedented numbers of marine mammal mortality events along the New York and New Jersey coasts in the past year. These animals are extremely important to our fragile marine ecosystems, and this decision could lead to disastrous consequences for these ecosystems. If Ocean Wind II's IHA request is granted, this could lead to the disruption or death of over 2000 marine mammals that use the Atlantic and Cape May County coast as part of their migratory route. Ocean Wind II's request should not be granted at this time; rather, there should be a series of thorough investigations into the effects that these surveying activities have on marine mammals and other marine wildlife. These investigations could form solutions that allow surveying to continue in the future without disrupting marine life.

As humans, we have a myriad of options when it comes to renewable clean energy, but marine mammals do not have any other options when it comes to their habitat, migratory route, and role in the ecosystem.

Donna Repoli  
[repolidonna@gmail.com](mailto:repolidonna@gmail.com)  
Stockton University Alumni, B.A. Marine Science  
[Clean Ocean Action](#)





itp esch - NOAA Service Account &lt;itp.esch@noaa.gov&gt;

---

## DENY ORSTED'S OCEAN II LEVEL B HARASSMENT REQUEST OF 2,856 MARINE MAMMALS

1 message

---

**Devin Waldron** <drwaldron95@gmail.com>  
To: ITP.Esch@noaa.gov

Thu, Jul 13, 2023 at 11:49 PM

Jolie Harrison  
Chief, Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
[ITP.Esch@noaa.gov](mailto:ITP.Esch@noaa.gov)

Dear Jolie Harrison,

My name is Devin Waldron, and I write to you because I do not support offshore wind projects and I certainly do not support Orsted's request to Harass 2,856 marine mammals in their Ocean Wind II project. Please help protect these marine mammals by denying Orsted IHA request to "take" or "harass" 16 different endangered and protected marine mammal species for high-resolution geophysical (HRG) marine site characterization surveys up and down the NJ shore and offshore, as well as in Raritan and Delaware Bays.

As shared before, I am in favor of clean energy, however, my objection here is that it is all at the cost of marine life, which is needlessly impacted despite there being better and already-approved locations. Far too many marine mammals have already paid the price and will tragically continue to. We must protect the waters off our shores—the waters off of New Jersey and New York are generally one of the most diverse in the world with 33 species of whales (including the endangered North Atlantic Right Whale), dolphins and a porpoise (5 endangered and all protected species), 4 species of seals (all protected) and 5 species of sea turtles (all endangered and protected). Plus, the threatened Piping Plover resides along the coast of New Jersey. We must do more to protect these beautiful creatures.

The equipment being used can be harmful to marine life (naturally, why else request an IHA), but more investigations must be done before any more requests can be considered. As you know, these IHAs allow "the potential to disturb (but not injure) a marine mammal or marine mammal stock in the wild by disrupting behavioral patterns, including, but not limited to, MIGRATION, BREATHING, NURSING, BREEDING, FEEDING, or SHELTERING." The idea that someone can think an animal will not be injured (or worse) but can have its migration, breathing, nursing, breeding, feeding, and/or sheltering affected is disturbing.

The government to stop the Level B harrassment of 2,856 marine mammals as requested by Orsted's Ocean Wind II project off of New Jersey and New York. Please act before it's too late.

Sincerely,

Devin

--

Devin Waldron  
(201) 602-7417  
[drwaldron95@gmail.com](mailto:drwaldron95@gmail.com)

