

Response to May 6, 2024 comments provided by Nation Marine Fisheries Service on the Request to Renew Incidental Harassment Authorization (IHA) Issued to Vineyard Northeast, LLC on July 27, 2023

***Comment 1:** Please confirm that this take request will cover a subset of the originally planned HRG survey activities. If so, please provide an updated estimate of the take requested for authorization. In addition, NMFS recommends use of average group sizes based on AMAPPS survey data and can share those values on request.*

Response: The amount of work proposed under this renewal is a subset of the analyzed activities that were not completed during the 2023 survey season as authorized in the 2023 IHA. Since July 2023, Vineyard Northeast has conducted 11 vessel days of HRG survey activities (approximately 860 km), which is approximately 2% of planned anticipated survey under the 2023 IHA. Therefore, 456 vessel days (36,500 km) remain for purposes of this renewal (See Table 1).

Table 1. Potential Geophysical Survey effort from July 27, 2024, through July 26, 2025.

Location	Approximate Survey Trackline (km)	Approximate Survey Distance Per Day (km)	Active Sound Source Days
HRG Survey Area	36,500	80	456

An updated take estimate is attached as Table 2 and includes the average group sizes based on most recent AMAPPS and OBIS SEAMAP data (Halpin *et al*, Palka *et al* 2017, Palka *et al*. 2021). For white-beaked dolphin, killer whale, false killer whale, blue whale and Atlantic spotted dolphin, the requested take is the average group size. For all other species, the requested take is a portion of the authorized take, accounting for survey completed to date (2%).

- ***Comment 2:** Please provide an updated estimate of the total survey area remaining for the proposed surveys. The request indicates 456 vessel days (36,500 km) are remaining of the original 467 vessel days (37,360 km) analyzed for the 2023 IHA. In addition, the 2023 request indicates that the Cape Cod SMA was removed from the survey area; please confirm that this SMA will not be included in the proposed survey area.*
- The survey area remains unchanged from the 2023 application and does not include the Cape Cod SMA. With only 2% of the planned survey completed, the survey area was not reduced from the 2023 IHA. Therefore, the calculated density-based exposures have not changed since the 2023 application.

- **Comment 3:** *Provide a map figure showing the updated survey area.*

Response: A map showing the survey area is attached. It remains unchanged from the 2023 application.

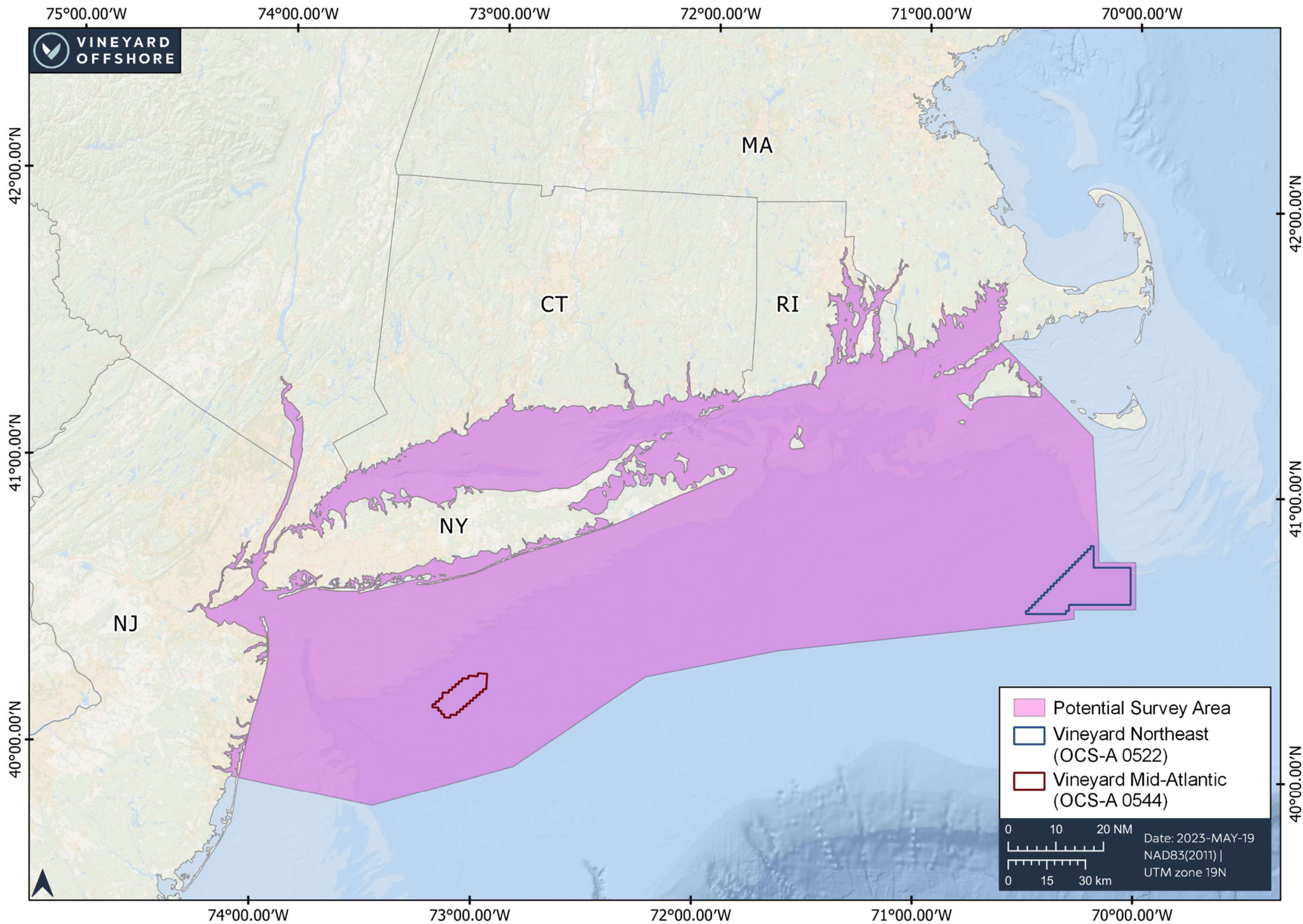
- **Comment 4:** *Confirm that the updated analysis uses the most up to date Roberts et al. density data to calculate the take request.*

Response: The 2023 application used the most up to date Roberts *et al.* density data, which was released in 2022 as version 12. The updated take request also uses these data. Note that in 2023, a correction (release as version 12.1) and an update to reference a supplementary report (version 12.2) were issued. These updates did not fundamentally change the model.

- **Comment 5:** *NMFS recommends using local occurrence data instead of the stock assessment abundance estimates for calculating take estimates for individual seal species from the guild density. If such data exist, please provide an updated take request for seals based upon local occurrence data, such as PSO data.*

Response: PSO data were collected during site characterization surveys within the survey area conducted in 2019 and 2022 through 2024. Table 2 reflects group sizes for individual seal species (gray seal and harbor seal) based on these data. The authorized take is based on density-based exposures. The requested take for the renewal request is a portion of the authorized take, accounting for survey completed to date (2%).

Table 2. Level B Take Request for IHA Renewal			
Species	Mean Group Size ^a	Previously Authorized Take	Requested Take ^b
<i>Mysticetes</i>			
Blue whale*	1	1	1
Fin whale*	1.25	20	20
Humpback whale	1.6	12	12
Minke whale	1.12	46	45
North Atlantic right whale*	1.58	12	12
Sei whale*	1.21	5	5
<i>Odontocetes</i>			
Sperm whale*	1.68	2	2
Atlantic spotted dolphin	24.2	29	25
Atlantic white-sided dolphin	12.2	129	126
Bottlenose dolphin (Offshore stock)	9.9	169	165
Bottlenose dolphin (Migratory stock)	9.9	45	44
Common dolphin (short-beaked)	30.2	7472	7300
White-beaked dolphin**	11.5	30	12
Risso's dolphin	7.28	9	9
Pilot whale (long-finned)	8.2	17	17
Killer whale**	3.6	4	4
False killer whale**	5.85	5	5
Harbor porpoise	2.5	347	339
<i>Pinnepeds</i>			
Gray seal	14	418	408
Harbor seal	4	939	917
Notes:			
*denotes species listed under the Endangered Species Act			
**denotes rare species included in take request because of recorded sightings			
^a Mean group sizes are NMFS recommended group size estimates based on AMAPPS and OBIS SEAMAP data, except for gray seal and harbor seal group sizes which are based on local occurrence data from PSO observations during site characterization activities in the survey area (2019, 2022-2024)			
^b For the rare species, blue whale and atlantic spotted dolphin, take is the average group size. For all other species take is a portion of the authorized take, accounting for survey completed to date (2%).			



References:

- Halpin, P.N., A.J. Read, E. Fujioka, B.D. Best, B. Donnelly, L.J. Hazen, C. Kot, K. Urian, E. LaBrecque, A. Dimatteo, J. Cleary, C. Good, L.B. Crowder, and K.D. Hyrenbach. 2009. OBIS-SEAMAP: The world data center for marine mammal, sea bird, and sea turtle distributions. *Oceanography* 22(2):104-115.
- Palka, D. L., S. Chavez-Rosales, E. Josephson, D. Cholewiak, H. L. Haas, L. Garrison, M. Jones, D. Sigourney, G. Waring, M. Jech, E. Broughton, M. Soldevilla, G. Davis, A. DeAngelis, C. R. Sasso, M. V. Winton, R. J. Smolowitz, G. Fay, E. LaBrecque, J. B. Leiness, Dettloff, M. Warden, K. Murray, and C. Orphanides. 2017. Atlantic Marine Assessment Program for Protected Species: 2010-2014. OCS Study BOEM 2017-071, Washington, D.C.
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- Roberts, J. J. 2022. Habitat-based Marine Mammal Density Models for the U.S. Atlantic: Latest Version. Marine Geospatial Ecology Laboratory/Duke University.