

# Reduced WTG Foundation Scenario – 79 Foundations and Updated Marine Mammal Take Estimates for the Revolution Wind Offshore Wind Farm

Submitted To:

**National Marine Fisheries Service  
Office of Protected Resources  
Silver Spring, MD**

Submitted By

**Revolution Wind, LLC**



Prepared By:

**LGL Ecological Research Associates, Inc.**

**And JASCO Applied Sciences**

**November 2022**

## Introduction

This memo provides revised take estimates based on a reduction in the number of wind turbine generator (WTG) foundations to be installed within the Lease Area. The maximum design envelope and ITR Application assumed up to 100 WTG foundations would be installed. This memo provides revised take estimates for a reduced installation scenario of 79 WTG foundations. This analysis supports the various Alternatives evaluated in the DEIS and the applicants layout design refinement and continued evaluation of technical constraints. Marine mammal exposure estimates from foundation installations were revised based on the same assumption used in the ITR application that a maximum of 3 WTG monopile foundations would be installed per-day. This results in an updated installation schedule of 78 WTG monopiles (3 per day for 26 days), 1 WTG monopile (1 per day for 1 day) and 2 OSS monopile foundations (1 per day for 2 days) installed in the highest density month of each species for a total of 29 days of piling. Because all foundations are expected to be installed within one month, only the highest monthly density for each species was used in calculating take rather than both the maximum density month and second highest monthly density.

## Revised Take Estimates

The following tables reflect the updated exposure modeling results for 79 WTG and 2 OSS foundation installations as well as corresponding reductions in potential take from HRG surveys related to inter-array cables. A reduction in total WTG foundations results in an overall reduction in take within the Lease Area and therefore an overall reduction in take across the 5-year duration of Project activities.

The amount of HRG survey trackline within the Lease Area has been reduced to reflect the shorter overall distance of inter-array cable between WTG foundations that will be installed. During construction, the Project previously assumed 11,600 km of HRG surveys would occur within the Lease Area. Based on a scenario of 79 WTG foundations, 9,559 km of HRG surveys are now expected to occur within the Lease Area. Assuming 70 km is surveyed per day, that results in 136.6 days of survey activity in the Lease Area. Multiplying the daily ensonified area (19.8 km<sup>2</sup>) by the number of days of survey activity results in a new total ensonified area of 2,704.1 km<sup>2</sup> in the Lease Area.

On an annual basis during operations, it was previously estimated that 2,640 km of HRG surveys would occur within the Lease Area. This has now been reduced to 2,117 km per year. Assuming 70 km is surveyed per day results in 30.2 days of survey activity in the Lease Area each year. Multiplying the daily ensonified area by the number of days of survey activity results in an annual ensonified area of 598.9 km<sup>2</sup> in the Lease Area. Over the four years of operations that would occur during the five-year period covered by the requested regulations, the total ensonified area in the Lease Area would be 2,395.7 km<sup>2</sup>.

The table numbers used below are the same as the corresponding tables in the ITR Application and supplemental Updated Densities Memo submitted to NMFS in August 2022 for 100 WTG foundations. The tables now show the revised take estimates based on the 79 WTG installation scenario. Additionally, Tables 51 and 52 from the supplemental Updated Densities Memo assuming the installation of 100 WTGs are repeated below for comparison.

The table numbers shown below are the same as the corresponding tables within the ITR Application.

Table 21. Estimated Level A and Level B take from 79 (7/12 m) WTG and 2 (7/15 m) OSS monopile foundation installations using an IHC S-4000 hammer assuming 10 dB of noise attenuation. Level B exposure modeling take estimates are based on the unweighted distances to the 160 dB level. “Static” Level B take estimates are from the standard density x area method described in the text, not from exposure modeling.

| Species                      | Exposure Modeling<br>Take Estimates |                                  |                                  | PSO Data<br>Take Estimate | Mean<br>Group Size | Highest<br>Level B<br>Take |
|------------------------------|-------------------------------------|----------------------------------|----------------------------------|---------------------------|--------------------|----------------------------|
|                              | Level A<br>(SPL <sub>cum</sub> )    | Level B<br>(SPL <sub>rms</sub> ) | Static Level B<br>Take Estimates |                           |                    |                            |
| <b>Mysticetes</b>            |                                     |                                  |                                  |                           |                    |                            |
| Blue Whale*                  | N/A                                 | N/A                              | N/A                              | -                         | 1.0                | 1                          |
| Fin Whale*                   | 6.4                                 | 14.9                             | 10.6                             | 15.8                      | 1.8                | 16                         |
| Humpback Whale               | 6.5                                 | 11.5                             | 7.5                              | 47.1                      | 2.0                | 48                         |
| Minke Whale                  | 60.9                                | 191.2                            | 63.6                             | 5.8                       | 1.2                | 192                        |
| North Atlantic Right Whale*  | 17.5                                | 21.6                             | 9.4                              | 1.4                       | 2.4                | 22                         |
| Sei Whale*                   | 2.5                                 | 7.8                              | 4.6                              | 0.4                       | 1.6                | 8                          |
| <b>Odontocetes</b>           |                                     |                                  |                                  |                           |                    |                            |
| Atlantic Spotted Dolphin     | 0.0                                 | 0.0                              | 1.9                              | -                         | 29.0               | 29                         |
| Atlantic White-Sided Dolphin | 0.1                                 | 199.5                            | 63.6                             | 4.6                       | 27.9               | 200                        |
| Bottlenose Dolphin           | 0.0                                 | 68.8                             | 33.0                             | 51.4                      | 7.8                | 69                         |
| Common Dolphin               | 0.0                                 | 1,327.6                          | 271.0                            | 1,308.9                   | 34.9               | 1,328                      |
| Harbor Porpoise              | 320.9                               | 661.0                            | 187.6                            | 1.3                       | 2.7                | 661                        |
| Pilot Whales                 | 0.0                                 | 5.5                              | 2.6                              | -                         | 8.4                | 9                          |
| Risso’s Dolphin              | 0.0                                 | 15.5                             | 6.1                              | 3.6                       | 5.4                | 16                         |
| Sperm Whale*                 | 0.0                                 | 2.8                              | 1.5                              | -                         | 1.5                | 3                          |
| <b>Pinnipeds</b>             |                                     |                                  |                                  |                           |                    |                            |
| Gray Seal                    | 4.9                                 | 253.8                            | 310.2                            | 3.5                       | 1.4                | 311                        |
| Harbor Seal                  | 32.0                                | 894.8                            | 697.0                            | 4.6                       | 1.4                | 895                        |

\* Denotes species listed under the Endangered Species Act

Table 35. Estimated Level B take from HRG surveys during construction. LA = Lease Area, ECR = Export Cable Route

| Species                      | Construction Phase Take<br>by Survey Area |       | Total<br>Density-based<br>Take Estimate | PSO Data<br>Take<br>Estimate | Mean<br>Group<br>Size | Highest<br>Level B<br>Take |
|------------------------------|-------------------------------------------|-------|-----------------------------------------|------------------------------|-----------------------|----------------------------|
|                              | LA                                        | ECR   |                                         |                              |                       |                            |
| <b>Mysticetes</b>            |                                           |       |                                         |                              |                       |                            |
| Blue Whale*                  | 0.0                                       | 0.0   | 0.0                                     | -                            | 1.0                   | 1                          |
| Fin Whale*                   | 4.4                                       | 1.4   | 5.8                                     | 6.6                          | 1.8                   | 7                          |
| Humpback Whale               | 2.8                                       | 1.2   | 4.0                                     | 16.5                         | 2.0                   | 17                         |
| Minke Whale                  | 11.8                                      | 3.7   | 15.5                                    | 5.9                          | 1.2                   | 16                         |
| North Atlantic Right Whale*  | 7.4                                       | 1.8   | 9.2                                     | -                            | 2.4                   | 10                         |
| Sei Whale*                   | 1.1                                       | 0.4   | 1.6                                     | -                            | 1.6                   | 2                          |
| <b>Odontocetes</b>           |                                           |       |                                         |                              |                       |                            |
| Atlantic Spotted Dolphin     | 0.3                                       | 0.1   | 0.3                                     | -                            | 29.0                  | 29                         |
| Atlantic White-Sided Dolphin | 24.5                                      | 6.5   | 31.0                                    | -                            | 27.9                  | 31                         |
| Bottlenose Dolphin           | 13.2                                      | 3.8   | 17.0                                    | 100.1                        | 7.8                   | 101                        |
| Common Dolphin               | 110.5                                     | 33.5  | 144.0                                   | 2,353.4                      | 34.9                  | 2,354                      |
| Harbor Porpoise              | 85.4                                      | 30.9  | 116.3                                   | -                            | 2.7                   | 117                        |
| Pilot Whales                 | 1.4                                       | 0.1   | 1.5                                     | -                            | 8.4                   | 9                          |
| Risso's Dolphin              | 0.8                                       | 0.2   | 1.0                                     | 2.3                          | 5.4                   | 6                          |
| Sperm Whale*                 | 0.4                                       | 0.1   | 0.5                                     | -                            | 1.5                   | 2                          |
| <b>Pinnipeds</b>             |                                           |       |                                         |                              |                       |                            |
| Gray Seal                    | 98.5                                      | 75.5  | 174.0                                   | 7.1                          | 1.4                   | 174                        |
| Harbor Seal                  | 221.2                                     | 169.6 | 390.9                                   | 11.2                         | 1.4                   | 391                        |

\* Denotes species listed under the Endangered Species Act

Table 36. Estimated Level B take from HRG surveys during operations. LA = Lease Area, ECR = Export Cable Route

| Species                      | Annual Operations Phase Take by Survey Area |      | Annual Total Density-based Take Estimate | Annual PSO Data Take Estimate | Mean Group Size | Highest Annual Level B Take | 4-year Level B Take |
|------------------------------|---------------------------------------------|------|------------------------------------------|-------------------------------|-----------------|-----------------------------|---------------------|
|                              | LA                                          | ECR  |                                          |                               |                 |                             |                     |
| <b>Mysticetes</b>            |                                             |      |                                          |                               |                 |                             |                     |
| Blue Whale*                  | 0.0                                         | 0.0  | 0.0                                      | -                             | 1.0             | 1                           | 4                   |
| Fin Whale*                   | 1.0                                         | 0.4  | 1.3                                      | 1.6                           | 1.8             | 2                           | 8                   |
| Humpback Whale               | 0.6                                         | 0.4  | 1.0                                      | 4.0                           | 2.0             | 5                           | 20                  |
| Minke Whale                  | 2.6                                         | 1.0  | 3.6                                      | 1.5                           | 1.2             | 4                           | 16                  |
| North Atlantic Right Whale*  | 1.6                                         | 0.5  | 2.1                                      | -                             | 2.4             | 3                           | 12                  |
| Sei Whale*                   | 0.3                                         | 0.1  | 0.4                                      | -                             | 1.6             | 2                           | 8                   |
| <b>Odontocetes</b>           |                                             |      |                                          |                               |                 |                             |                     |
| Atlantic Spotted Dolphin     | 0.1                                         | 0.0  | 0.1                                      | -                             | 29.0            | 29                          | 116                 |
| Atlantic White-Sided Dolphin | 5.4                                         | 1.8  | 7.2                                      | -                             | 27.9            | 28                          | 112                 |
| Bottlenose Dolphin           | 2.9                                         | 1.0  | 3.9                                      | 24.6                          | 7.8             | 25                          | 100                 |
| Common Dolphin               | 24.5                                        | 9.4  | 33.8                                     | 578.0                         | 34.9            | 579                         | 2,316               |
| Harbor Porpoise              | 18.9                                        | 8.9  | 27.8                                     | -                             | 2.7             | 28                          | 112                 |
| Pilot Whales                 | 0.3                                         | 0.0  | 0.3                                      | -                             | 8.4             | 9                           | 36                  |
| Risso's Dolphin              | 0.2                                         | 0.1  | 0.2                                      | 0.6                           | 5.4             | 6                           | 24                  |
| Sperm Whale*                 | 0.1                                         | 0.0  | 0.1                                      | -                             | 1.5             | 2                           | 8                   |
| <b>Pinnipeds</b>             |                                             |      |                                          |                               |                 |                             |                     |
| Gray Seal                    | 27.2                                        | 21.1 | 48.3                                     | 1.7                           | 1.4             | 49                          | 196                 |
| Harbor Seal                  | 61.1                                        | 47.5 | 108.6                                    | 2.7                           | 1.4             | 109                         | 436                 |

\* Denotes species listed under the Endangered Species Act

Table 51 . Summary of the estimated Level A and Level B take from all activities on a year-by-year basis for the Project (assuming 79 WTG foundations).

| Species                      | NMFS Stock Abundance <sup>a</sup> | Year 1 (Maximum)       |                        | Year 2                 |                        | Year 3                 |                        | Year 4                 |                        | Year 5                 |                        |
|------------------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                              |                                   | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take |
| <b>Mysticetes</b>            |                                   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Blue Whale*                  | 402                               | -                      | 3                      | -                      | 1                      | -                      | 1                      | -                      | 1                      | -                      | 1                      |
| Fin Whale*                   | 6,802                             | -                      | 40                     | -                      | 2                      | -                      | 2                      | -                      | 2                      | -                      | 2                      |
| Humpback Whale               | 1,396                             | 7                      | 77                     | -                      | 5                      | -                      | 5                      | -                      | 5                      | -                      | 5                      |
| Minke Whale                  | 21,968                            | -                      | 304                    | -                      | 4                      | -                      | 4                      | -                      | 4                      | -                      | 4                      |
| North Atlantic Right Whale*  | 368                               | -                      | 44                     | -                      | 3                      | -                      | 3                      | -                      | 3                      | -                      | 3                      |
| Sei Whale*                   | 6,292                             | -                      | 18                     | -                      | 2                      | -                      | 2                      | -                      | 2                      | -                      | 2                      |
| <b>Odontocetes</b>           |                                   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Atlantic Spotted Dolphin     | 39,921                            | -                      | 87                     | -                      | 29                     | -                      | 29                     | -                      | 29                     | -                      | 29                     |
| Atlantic White-Sided Dolphin | 93,233                            | -                      | 260                    | -                      | 28                     | -                      | 28                     | -                      | 28                     | -                      | 28                     |
| Bottlenose Dolphin           | 62,851                            | -                      | 180                    | -                      | 25                     | -                      | 25                     | -                      | 25                     | -                      | 25                     |
| Common Dolphin               | 172,974                           | -                      | 3,913                  | -                      | 579                    | -                      | 579                    | -                      | 579                    | -                      | 579                    |
| Harbor Porpoise              | 95,543                            | 49                     | 1,125                  | -                      | 28                     | -                      | 28                     | -                      | 28                     | -                      | 28                     |
| Pilot Whales                 | 68,139                            | -                      | 27                     | -                      | 9                      | -                      | 9                      | -                      | 9                      | -                      | 9                      |
| Risso's Dolphin              | 35,215                            | -                      | 28                     | -                      | 6                      | -                      | 6                      | -                      | 6                      | -                      | 6                      |
| Sperm Whale*                 | 4,349                             | -                      | 7                      | -                      | 2                      | -                      | 2                      | -                      | 2                      | -                      | 2                      |
| <b>Pinnipeds</b>             |                                   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Gray Seal                    | 27,300                            | 3                      | 978                    | -                      | 49                     | -                      | 49                     | -                      | 49                     | -                      | 49                     |
| Harbor Seal                  | 61,336                            | 5                      | 2,393                  | -                      | 109                    | -                      | 109                    | -                      | 109                    | -                      | 109                    |

\*Denotes species listed under the Endangered Species Act

<sup>a</sup> Based on latest NMFS Stock Assessment Report

Table 51. Summary of the estimated Level A and Level B take from all activities on a year-by-year basis for the Project (assuming 100 WTG foundations).

| Species                      | NMFS Stock Abundance <sup>a</sup> | Year 1 (Maximum)       |                        | Year 2                 |                        | Year 3                 |                        | Year 4                 |                        | Year 5                 |                        |
|------------------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                              |                                   | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take | Requested Level A Take | Requested Level B Take |
| <b>Mysticetes</b>            |                                   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Blue Whale*                  | 402                               | -                      | 3                      | -                      | 1                      | -                      | 1                      | -                      | 1                      | -                      | 1                      |
| Fin Whale*                   | 6,802                             | -                      | 44                     | -                      | 2                      | -                      | 2                      | -                      | 2                      | -                      | 2                      |
| Humpback Whale               | 1,396                             | 8                      | 85                     | -                      | 5                      | -                      | 5                      | -                      | 5                      | -                      | 5                      |
| Minke Whale                  | 21,968                            | -                      | 344                    | -                      | 5                      | -                      | 5                      | -                      | 5                      | -                      | 5                      |
| North Atlantic Right Whale*  | 368                               | -                      | 50                     | -                      | 3                      | -                      | 3                      | -                      | 3                      | -                      | 3                      |
| Sei Whale*                   | 6,292                             | -                      | 20                     | -                      | 2                      | -                      | 2                      | -                      | 2                      | -                      | 2                      |
| <b>Odontocetes</b>           |                                   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Atlantic Spotted Dolphin     | 39,921                            | -                      | 87                     | -                      | 29                     | -                      | 29                     | -                      | 29                     | -                      | 29                     |
| Atlantic White-Sided Dolphin | 93,233                            | -                      | 312                    | -                      | 28                     | -                      | 28                     | -                      | 28                     | -                      | 28                     |
| Bottlenose Dolphin           | 62,851                            | -                      | 211                    | -                      | 29                     | -                      | 29                     | -                      | 29                     | -                      | 29                     |
| Common Dolphin               | 172,974                           | -                      | 4,532                  | -                      | 659                    | -                      | 659                    | -                      | 659                    | -                      | 659                    |
| Harbor Porpoise              | 95,543                            | 49                     | 1,283                  | -                      | 33                     | -                      | 33                     | -                      | 33                     | -                      | 33                     |
| Pilot Whales                 | 68,139                            | -                      | 27                     | -                      | 9                      | -                      | 9                      | -                      | 9                      | -                      | 9                      |
| Risso's Dolphin              | 35,215                            | -                      | 30                     | -                      | 6                      | -                      | 6                      | -                      | 6                      | -                      | 6                      |
| Sperm Whale*                 | 4,349                             | -                      | 8                      | -                      | 2                      | -                      | 2                      | -                      | 2                      | -                      | 2                      |
| <b>Pinnipeds</b>             |                                   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| Gray Seal                    | 27,300                            | 3                      | 1,073                  | -                      | 49                     | -                      | 49                     | -                      | 49                     | -                      | 49                     |
| Harbor Seal                  | 61,336                            | 5                      | 2,669                  | -                      | 109                    | -                      | 109                    | -                      | 109                    | -                      | 109                    |

\* Denotes species listed under the Endangered Species Act

Table 52 . Total 5-year requested Level A and Level B take from all activities for the Project (assuming 79 WTG foundations).

| Species                      | NMFS Stock Abundance <sup>a</sup> | 5-Year Totals          |                        | Percent of NMFS Stock Abundance <sup>a</sup> |
|------------------------------|-----------------------------------|------------------------|------------------------|----------------------------------------------|
|                              |                                   | Requested Level A Take | Requested Level B Take |                                              |
| <b>Mysticetes</b>            |                                   |                        |                        |                                              |
| Blue Whale*                  | 402                               | -                      | 7                      | 1.7                                          |
| Fin Whale*                   | 6,802                             | -                      | 48                     | 0.7                                          |
| Humpback Whale               | 1,396                             | 7                      | 97                     | 6.9                                          |
| Minke Whale                  | 21,968                            | -                      | 320                    | 1.5                                          |
| North Atlantic Right Whale*  | 368                               | -                      | 56                     | 15.2                                         |
| Sei Whale*                   | 6,292                             | -                      | 26                     | 0.4                                          |
| <b>Odontocetes</b>           |                                   |                        |                        |                                              |
| Atlantic Spotted Dolphin     | 39,921                            | -                      | 203                    | 0.5                                          |
| Atlantic White-Sided Dolphin | 93,233                            | -                      | 372                    | 0.4                                          |
| Bottlenose Dolphin           | 62,851                            | -                      | 280                    | 0.4                                          |
| Common Dolphin               | 172,974                           | -                      | 6,229                  | 3.6                                          |
| Harbor Porpoise              | 95,543                            | 49                     | 1,237                  | 1.3                                          |
| Pilot Whales                 | 68,139                            | -                      | 63                     | 0.1                                          |
| Risso's Dolphin              | 35,215                            | -                      | 52                     | 0.1                                          |
| Sperm Whale*                 | 4,349                             | -                      | 15                     | 0.3                                          |
| <b>Pinnipeds</b>             |                                   |                        |                        |                                              |
| Gray Seal                    | 27,300                            | 3                      | 1,174                  | 4.3                                          |
| Harbor Seal                  | 61,336                            | 5                      | 2,829                  | 4.6                                          |

\* Denotes species listed under the Endangered Species Act

<sup>a</sup> Based on latest NMFS Stock Assessment Report



Table 52 . Total 5-year requested Level A and Level B take from all activities for the Project (assuming 100 WTG foundations).

| Species                      | NMFS Stock Abundance <sup>a</sup> | 5-Year Totals          |                        | Percent of NMFS Stock Abundance <sup>a</sup> |
|------------------------------|-----------------------------------|------------------------|------------------------|----------------------------------------------|
|                              |                                   | Requested Level A Take | Requested Level B Take |                                              |
| <b>Mysticetes</b>            |                                   |                        |                        |                                              |
| Blue Whale*                  | 402                               | -                      | 7                      | 1.7                                          |
| Fin Whale*                   | 6,802                             | -                      | 52                     | 0.8                                          |
| Humpback Whale               | 1,396                             | 8                      | 105                    | 7.5                                          |
| Minke Whale                  | 21,968                            | -                      | 364                    | 1.7                                          |
| North Atlantic Right Whale*  | 368                               | -                      | 62                     | 16.8                                         |
| Sei Whale*                   | 6,292                             | -                      | 28                     | 0.4                                          |
| <b>Odontocetes</b>           |                                   |                        |                        |                                              |
| Atlantic Spotted Dolphin     | 39,921                            | -                      | 203                    | 0.5                                          |
| Atlantic White-Sided Dolphin | 93,233                            | -                      | 424                    | 0.5                                          |
| Bottlenose Dolphin           | 62,851                            | -                      | 327                    | 0.5                                          |
| Common Dolphin               | 172,974                           | -                      | 7,168                  | 4.1                                          |
| Harbor Porpoise              | 95,543                            | 49                     | 1,415                  | 1.5                                          |
| Pilot Whales                 | 68,139                            | -                      | 63                     | 0.1                                          |
| Risso's Dolphin              | 35,215                            | -                      | 54                     | 0.2                                          |
| Sperm Whale*                 | 4,349                             | -                      | 16                     | 0.4                                          |
| <b>Pinnipeds</b>             |                                   |                        |                        |                                              |
| Gray Seal                    | 27,300                            | 3                      | 1,269                  | 4.6                                          |
| Harbor Seal                  | 61,336                            | 5                      | 3,105                  | 5.1                                          |

\* Denotes species listed under the Endangered Species Act

<sup>a</sup> Based on latest NMFS Stock Assessment Report

Table 52. This table shows the difference between the total requested take calculated assuming the original 100 WTG and the new scenario assuming 79 WTG foundation installations (100 WTG estimates minus 79 WTG estimates).

| Species                      | NMFS Stock Abundance <sup>a</sup> | 5-Year Totals          |                        | Percent of NMFS Stock Abundance <sup>a</sup> |
|------------------------------|-----------------------------------|------------------------|------------------------|----------------------------------------------|
|                              |                                   | Requested Level A Take | Requested Level B Take |                                              |
| <b>Mysticetes</b>            |                                   |                        |                        |                                              |
| Blue Whale*                  | 402                               | -                      | 0                      | 0.0                                          |
| Fin Whale*                   | 6,802                             | -                      | -4                     | -0.1                                         |
| Humpback Whale               | 1,396                             | -1                     | -8                     | -0.6                                         |
| Minke Whale                  | 21,968                            | -                      | -44                    | -0.2                                         |
| North Atlantic Right Whale*  | 368                               | -                      | -6                     | -1.6                                         |
| Sei Whale*                   | 6,292                             | -                      | -2                     | 0.0                                          |
| <b>Odontocetes</b>           |                                   |                        |                        |                                              |
| Atlantic Spotted Dolphin     | 39,921                            | -                      | 0                      | 0.0                                          |
| Atlantic White-Sided Dolphin | 93,233                            | -                      | -52                    | -0.1                                         |
| Bottlenose Dolphin           | 62,851                            | -                      | -47                    | -0.1                                         |
| Common Dolphin               | 172,974                           | -                      | -939                   | -0.5                                         |
| Harbor Porpoise              | 95,543                            | 0                      | -178                   | -0.2                                         |
| Pilot Whales                 | 68,139                            | -                      | 0                      | 0.0                                          |
| Risso's Dolphin              | 35,215                            | -                      | -2                     | 0.0                                          |
| Sperm Whale*                 | 4,349                             | -                      | -1                     | 0.0                                          |
| <b>Pinnipeds</b>             |                                   |                        |                        |                                              |
| Gray Seal                    | 27,300                            | 0                      | -95                    | -0.3                                         |
| Harbor Seal                  | 61,336                            | 0                      | -276                   | -0.4                                         |

\* Denotes species listed under the Endangered Species Act

<sup>a</sup> Based on latest NMFS Stock Assessment Report