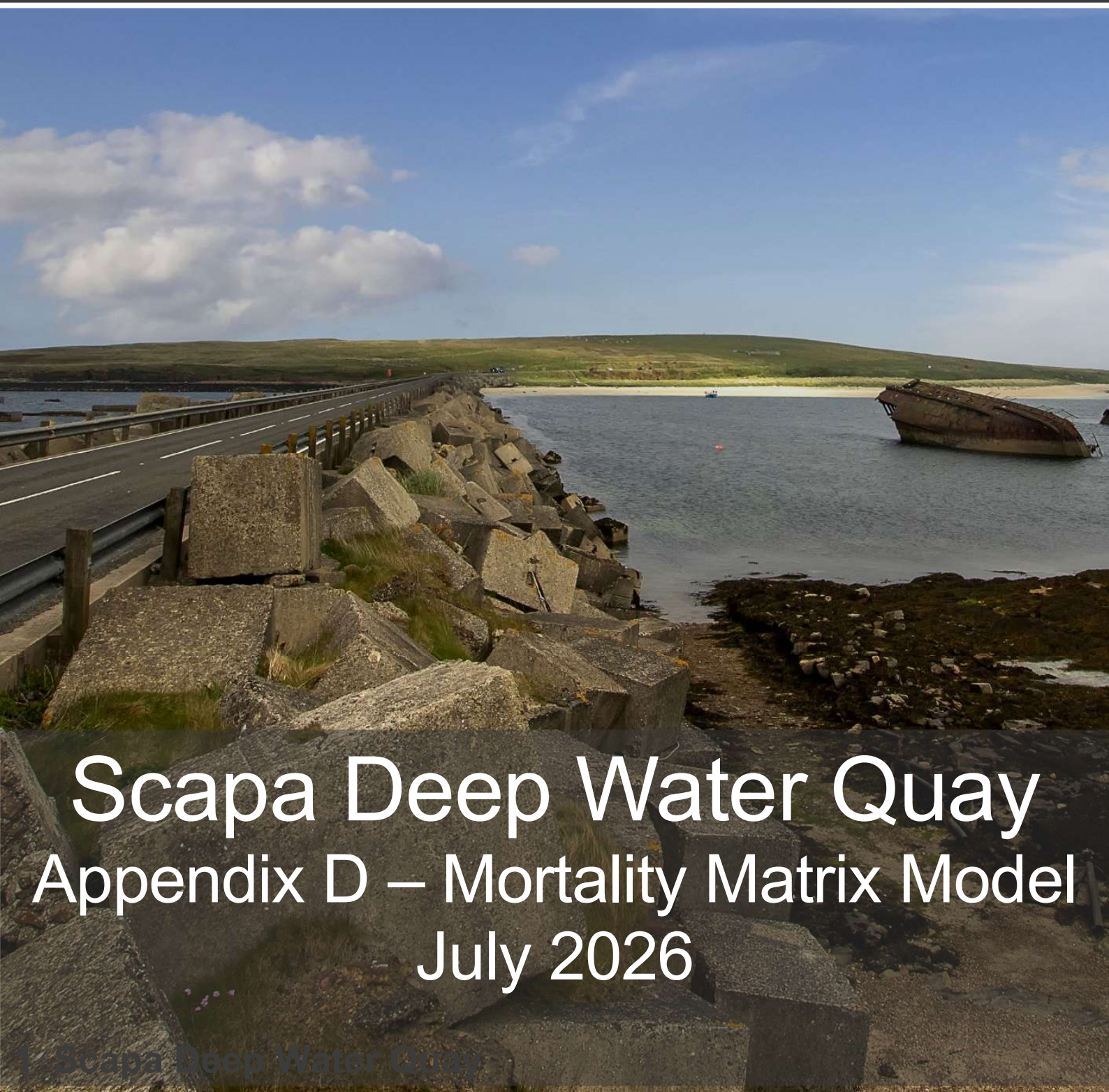




# Scapa Deep Water Quay

## Appendix D – Mortality Matrix Model

### July 2026

1 Scapa Deep Water Quay

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Mortality - Applicant Case

| Population count by site  |                      |                    |                      |                  |       |                        |      |                 |               |                |                      |                             |                     |                             |                    |                    |                          |
|---------------------------|----------------------|--------------------|----------------------|------------------|-------|------------------------|------|-----------------|---------------|----------------|----------------------|-----------------------------|---------------------|-----------------------------|--------------------|--------------------|--------------------------|
|                           | Great northern diver | Red-throated diver | Black-throated diver | Long-tailed duck | Eider | Red breasted merganser | Shag | Slavonian Grebe | Velvet Scoter | Arctic skua (p | Atlantic Puffin (pai | Black-legged kittiwake (pai | Common guillemot (p | Great black-backed gull (pa | Great skua (pairs) | Northern fulmar (p | Peregrine falcon (pairs) |
| Scapa Flow SPA            | 505                  | 76                 | 57                   | 505              | 1997  | 539                    | 2927 | 135             | N/A           | N/A            | N/A                  | N/A                         | N/A                 | N/A                         | N/A                | N/A                | N/A                      |
| North Orkney SPA          | 308                  | 47                 | N/A                  | N/A              | N/A   | N/A                    | N/A  | 120             | 147           | N/A            | N/A                  | N/A                         | N/A                 | N/A                         | N/A                | N/A                | N/A                      |
| Orkney Mainland Moors SPA | N/A                  | 18                 | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           | N/A            | N/A                  | N/A                         | N/A                 | N/A                         | N/A                | N/A                | N/A                      |
| Hoy SPA                   | N/A                  | 58                 | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           | 59             | 3500                 | 3000                        | 13400               | 570                         | 1900               | 35000              | 6                        |

| Average peak count by site |                      |                    |                      |                  |       |                        |      |                 |               |             |                 |                        |                  |                         |            |                 |                          |
|----------------------------|----------------------|--------------------|----------------------|------------------|-------|------------------------|------|-----------------|---------------|-------------|-----------------|------------------------|------------------|-------------------------|------------|-----------------|--------------------------|
|                            | Great northern diver | Red-throated diver | Black-throated diver | Long-tailed duck | Eider | Red breasted merganser | Shag | Slavonian Grebe | Velvet Scoter | Arctic skua | Atlantic Puffin | Black-legged kittiwake | Common guillemot | Great black-backed gull | Great skua | Northern fulmar | Peregrine falcon (Pairs) |
|                            | 33                   | 3                  | 15                   | 387.6            | 92    | 2.7                    | 61   | 5.67            | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     | N/A        | N/A             | N/A                      |
|                            | 4.6                  | 0.3                | N/A                  | N/A              | N/A   | N/A                    | N/A  | 0.567           | 0             | N/A         | N/A             | N/A                    | N/A              | N/A                     | N/A        | N/A             | N/A                      |
|                            | N/A                  | 2                  | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     | N/A        | N/A             | N/A                      |
|                            | N/A                  | 2                  | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           | 5           | 3               | 83                     | 87               | 11                      | 4          | 56              | 1                        |

Annual mortality (assuming 90% displacement and 1% mortality)

|                           | Great northern diver | Red-throated diver | Black-throated diver | Long-tailed duck | Eider | Red breasted merganser | Shag  | Slavonian Grebe | Velvet Scoter | Arctic skua | Atlantic Puffin | Black-legged kittiwake | Common guillemot | Great black-backed gull | Great skua | Northern fulmar | Peregrine falcon |
|---------------------------|----------------------|--------------------|----------------------|------------------|-------|------------------------|-------|-----------------|---------------|-------------|-----------------|------------------------|------------------|-------------------------|------------|-----------------|------------------|
| Scapa Flow SPA            | 0.297                | 0.027              | 0.135                | 3.4884           | 0.828 | 0.0243                 | 0.549 | 0.05103         | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| North Orkney SPA          | 0.0414               | 0.0027             | N/A                  | N/A              | N/A   | N/A                    | N/A   | 0.005103        |               | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Orkney Mainland Moors SPA | N/A                  | 0.018              | N/A                  | N/A              | N/A   | N/A                    | N/A   | N/A             | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Hoy SPA                   | N/A                  |                    | N/A                  | N/A              | N/A   | N/A                    | N/A   | N/A             | N/A           |             |                 |                        |                  |                         |            |                 |                  |

Annual mortality by site as % of population (assuming 90% displacement and 1% mortality)

|                           | Great northern diver | Red-throated diver | Black-throated diver | Long-tailed duck | Eider  | Red breasted merganser | Shag   | Slavonian Grebe | Velvet Scoter | Arctic skua | Atlantic Puffin | Black-legged kittiwake | Common guillemot | Great black-backed gull | Great skua | Northern fulmar | Peregrine falcon |
|---------------------------|----------------------|--------------------|----------------------|------------------|--------|------------------------|--------|-----------------|---------------|-------------|-----------------|------------------------|------------------|-------------------------|------------|-----------------|------------------|
| Scapa Flow SPA            | 0.059%               | 0.036%             | 0.237%               | 0.691%           | 0.041% | 0.005%                 | 0.019% | 0.038%          | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| North Orkney SPA          | 0.013%               | 0.006%             | N/A                  | N/A              | N/A    | N/A                    | N/A    | 0.004%          | 0.000%        | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Orkney Mainland Moors SPA | N/A                  | 0.100%             | N/A                  | N/A              | N/A    | N/A                    | N/A    | N/A             | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Hoy SPA                   | N/A                  | 0.031%             | N/A                  | N/A              | N/A    | N/A                    | N/A    | N/A             | N/A           | 0.076%      | 0.001%          | 0.025%                 | 0.006%           | 0.017%                  | 0.002%     | 0.001%          | 0.150%           |

25-year mortality (assuming 90% displacement and 1% mortality)

|                           | Great northern diver | Red-throated diver | Black-throated diver | Long-tailed duck | Eider | Red breasted merganser | Shag | Slavonian Grebe | Velvet Scoter | Arctic skua | Atlantic Puffin | Black-legged kittiwake | Common guillemot | Great black-backed gull | Great skua | Northern fulmar | Peregrine falcon |
|---------------------------|----------------------|--------------------|----------------------|------------------|-------|------------------------|------|-----------------|---------------|-------------|-----------------|------------------------|------------------|-------------------------|------------|-----------------|------------------|
| Scapa Flow SPA            | 7.4                  | 0.7                | 3.4                  | 87.2             | 20.7  | 0.6075                 | 13.7 | 1.3             | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| North Orkney SPA          | 1.035                | 0.0675             | N/A                  | N/A              | N/A   | N/A                    | N/A  | 0.127575        |               | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Orkney Mainland Moors SPA | N/A                  | 0.45               | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Hoy SPA                   | N/A                  |                    | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           |             |                 |                        |                  |                         |            |                 |                  |

25-year mortality by site as % of population (assuming 90% displacement and 1% mortality)

|                           | Great northern diver | Red-throated diver | Black-throated diver | Long-tailed duck | Eider | Red breasted merganser | Shag | Slavonian Grebe | Velvet Scoter | Arctic skua | Atlantic Puffin | Black-legged kittiwake | Common guillemot | Great black-backed gull | Great skua | Northern fulmar | Peregrine falcon |
|---------------------------|----------------------|--------------------|----------------------|------------------|-------|------------------------|------|-----------------|---------------|-------------|-----------------|------------------------|------------------|-------------------------|------------|-----------------|------------------|
| Scapa Flow SPA            | 1.47%                | 0.9%               | 6%                   | 17.27%           | 1%    | 0.1%                   | 0.5% | 0.9%            | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| North Orkney SPA          | 0.34%                | 0.14%              | N/A                  | N/A              | N/A   | N/A                    | N/A  | 0.1%            |               | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Orkney Mainland Moors SPA | N/A                  | 3%                 | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           | N/A         | N/A             | N/A                    | N/A              | N/A                     |            | N/A             | N/A              |
| Hoy SPA                   | N/A                  |                    | N/A                  | N/A              | N/A   | N/A                    | N/A  | N/A             | N/A           |             |                 |                        |                  |                         |            |                 |                  |

Count data from EnviroCentre

| Species         |              | Distance band | Survey period  | Peak month | Peak number | Average of peak count | % population | SPA   | Average number (Oct/Nov to Mar) |  |
|-----------------|--------------|---------------|----------------|------------|-------------|-----------------------|--------------|-------|---------------------------------|--|
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
| Slavonian grebe | Non-breeding | 0 – 500 m     | Yr 1 - 2020/21 | Feb        | 7           |                       | 3.45         | 2.5 % |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    | 5           | 3.7 %                 | 1.85         | 1.40% |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | March      | 5           | 3.70%                 | 1.125        | 0.80% |                                 |  |
|                 |              | 0 – 1 km      | Yr 1 - 2020/21 | Feb        | 7           | 5.20%                 | 3.55         | 2.60% |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    | 5           | 3.70%                 | 2.05         | 1.5 % |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | Nov        | 5           | 3.70%                 | 1.625        | 1.2 % |                                 |  |
|                 |              | 0 – 2 km      | Yr 1 - 2020/21 | Feb        | 7           | 5.20%                 | 3.55         | 2.60% |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    | 5           | 3.7 %                 | 2.05         | 1.5 % |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | March      | 5           | 3.7 %                 | 1.625        | 1.2 % |                                 |  |
|                 |              | 0 – 1 km      | Yr 1 - 2020/21 | Nov-Mar    | 1           |                       |              |       |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    | 3           |                       |              |       |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | Nov        |             |                       |              |       |                                 |  |
| Velvet Scoter   |              | 0 – 2 km      | Yr 1 - 2020/21 | Feb        |             |                       |              |       |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    |             |                       |              |       |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | March      | 4           |                       |              |       |                                 |  |
|                 |              | 0 – 1 km      | Yr 1 - 2020/21 | Feb        | 0           |                       |              |       |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    | 0           |                       |              |       |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | Nov        | 0           |                       |              |       |                                 |  |
|                 |              | 0 – 2 km      | Yr 1 - 2020/21 | Feb        | 0           |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               |                |            |             |                       |              |       |                                 |  |
|                 |              |               | Yr 2 - 2021/22 | Dec/Feb    | 0           |                       |              |       |                                 |  |
|                 |              |               | Yr 3 - 2023/24 | March      | 0           |                       |              |       |                                 |  |

The other species requested were not recorded in pairs, only peak counts of individuals, which were then used to assess against the Hoy SPA populations. See below, which is extracted from the HRA.

Arctic Skua – Small numbers were recorded flying past very infrequently during the summer months, with a peak of five birds in June 2022. The closest known breeding areas are on East Mainland, ~10km distance, supporting only one or a few pairs at each location. The five birds recorded represents 4.2% of the Hoy SPA population (59 pairs)

Great Skua – Small numbers, with a peak of 4 birds/hr flying past in July 2021. Numbers in 2022 were significantly lower, probably due to the prevalence of avian flu which has decimated the local, and national, populations. The 4 birds/hr represents 0.1% of the Hoy SPA population (1,900 pairs).

Great Black-backed Gull – a peak of 11 birds were recorded during the summer, and up to 7 birds and hour recorded flying past at its peak. One pair nesting close to the Proposed Development site. It is unlikely that birds recorded were part of the Hoy SPA complex. The peak of 11 birds represents 0.96% of the Hoy SPA population (570 pairs).

Fulmar – Sizable numbers were recorded flying past during the summer months, with a peak of 56/hr in July 2022. It is considered that the vast majority, if not all, birds recorded were from the breeding colony to the north of the Proposed Development site. The peak of 56 birds/hr represents 0.08% of the Hoy SPA population (35,000 pairs).

Kittiwake – Small numbers were recorded flying past during the summer months, with a peak of 7/hr in June 2022. A peak count of 83 birds on the water within 2km was also recorded. It is considered that the vast majority, if not all, birds recorded were from the breeding colony to the north of the Proposed Development site. The peak of 83 birds represents 1.4% of the Hoy SPA population (3000 pairs).

Guillemot – Small numbers were recorded, with a peak of 27 birds within 1km of the Proposed Development and 87 within 2km. Small numbers were also recorded flying past the Proposed Development site, with a peak of 6/hr in June 2022. It is considered that the vast majority, if not all, birds recorded were from the breeding colony to the north of the Proposed Development site. The peak of 87 birds represents 0.3% of the Hoy SPA population (13,000 pairs).

Puffin – This species was recorded on 7 out of 48 watch days during 2020 and 2022, with a peak of 3 birds. It is possible that these birds are from Hoy SPA but the area in the vicinity of the proposed SDWQ site is not considered to be of importance to this species. The peak of three birds represents 0.04% of the Hoy SPA population (3,500 pairs).

Peregrine

A Peregrine pair were present in 2022 at a traditional territory well to the north of the proposal site and fledged at least one youngster, which was seen occasionally later in the season from the main VP and walk-ins.

Great northern diver numbers during the flightless moult period

| Month                           | No. count days | Average count <2km | Peak count <2km | count  |
|---------------------------------|----------------|--------------------|-----------------|--------|
| Feb-21                          | 4              | 6.5                |                 | 16     |
| Mar-21                          | 4              | 9                  |                 | 12     |
| Apr-21                          | 2              | 24                 |                 | 26     |
| 2021 seasonal figures           | 10             | 11                 |                 | 26     |
| Feb-22                          | 4              | 17.25 [25.5]*      |                 | 24     |
| Mar-22                          | 4              | 22 [27.25]         |                 | 30     |
| Apr-22                          | 2              | 35 [36]            |                 | 38     |
| 2022 seasonal figures           | 10             | 22.7 [28.3]        |                 | 38     |
| Feb-24                          | 4              | 20.5 [23]          |                 | 26     |
| Mar-24                          | 4              | 26.5 [28]          |                 | 35     |
| 2024 seasonal figures           |                | 8 [23.5 [24.25]    |                 | 35     |
| Average seasonal max peak count |                |                    |                 | 33     |
| Max Peak Count                  |                |                    |                 | 38     |
| Average of all peak counts      |                |                    |                 | 25.875 |

NS: Average of the peak counts

Applicant case: Average count

Black-throated diver numbers during the flightless moult period

| Month                 | No. count days | Average count 0-1km | Peak count 1km | 0- Average count 2km | Peak count <2km | count |
|-----------------------|----------------|---------------------|----------------|----------------------|-----------------|-------|
| Nov-20                | 4              | 4.25                | 7              | 4.25                 | 7               |       |
| Dec 2020*             | 4              | 0.75                | 2              | 2.25                 | 6               |       |
| 2020 seasonal figures | 8              | 2.5                 | 7              | 3.25                 | 7               |       |
| Sep-21                | 2              | 1                   | 2              | 1                    | 2               |       |
| Oct-21                | 4              | 3                   | 7              | 3                    | 7               |       |
| Nov-21                | 4              | 0                   | 0              | 0                    | 0               |       |
| Dec-21                | 4              | 3                   | 10             | 3.5                  | 10              |       |
| 2021 seasonal figures | 14             | 1.9                 | 10             | 2                    | 10              |       |
| Oct-23                | 2              | 7                   | 11             | 9.5                  | 19              |       |
| Nov-23                | 4              | 0.5                 | 1              | 16.5                 | 28              |       |
| Dec-23                | 4              | 1.25                | 3              | 3.25                 | 11              |       |
| 2023 seasonal figures | 10             | 2.1                 | 11             | 9.8                  | 28              |       |

% of SPA (57 Individuals)

|                                 |      |
|---------------------------------|------|
| Original HRA as submitted       |      |
| Seasonal average across years   | 2.17 |
| Average counts across all years | 2.31 |
| NatureScot Advice               |      |
| Peak count                      | 11   |
| Xodus proposed methodology      |      |

|                                        |      |     |      |        |
|----------------------------------------|------|-----|------|--------|
| Average of all peak counts             | 4.77 | 10  | 8.4% | 17.54% |
| Average of the max seasonal peak count | 9.33 | 16% | 15   | 26.32% |
| Peak Count                             | 11   | 19% | 28   | 49.12% |
| Average of all peak counts             | 4.77 | 8%  | 10   | 17.54% |

Long-tailed duck numbers during the pre-migration congregation period

| Month                               | No. count days | Average count <2km | Peak count <2km | count |
|-------------------------------------|----------------|--------------------|-----------------|-------|
| Mar-21                              | 4              | 35                 | 60              |       |
| Apr-21                              | 4              | 134                | 176             |       |
| May-21                              | 2              | 310                | 414             |       |
| 2021 seasonal figures               | 10             | 130                | 414             |       |
| Mar-22                              | 4              | 73                 | 234             |       |
| Apr-22                              | 4              | 42                 | 75              |       |
| May-22                              | 1              | 58                 | 58              |       |
| 2022 seasonal figures               | 9              | 58                 | 234             |       |
| Mar-24                              | 4              | 374                | 515             |       |
| Average peak count (Applicant case) |                |                    |                 | 387.7 |
| Peak Count (NS case)                |                |                    |                 | 515   |

Eider numbers during their flightless moult period

| Month                               | No. count days | Average count <2km | Peak count <2km | count |
|-------------------------------------|----------------|--------------------|-----------------|-------|
| Jul-21                              | 4              | 1.25               | 3               |       |
| Aug-21                              | 4              | 51.75              | 93              |       |
| Sep-21                              | 2              | 51                 | 71              |       |
| 2021 seasonal figures               | 10             | 31.4               | 93              |       |
| Jul-22                              | 4              | 72                 | 80              |       |
| Aug-22                              | 4              | 64.75              | 91              |       |
| Sep-22                              | 2              | 50.5               | 57              |       |
| 2022 seasonal figures               | 10             | 64.8               | 91              |       |
| Average peak count (Applicant case) |                |                    | 92.0            |       |
| Average count (Applicant case)      |                | 48.1               |                 |       |
| Peak Count (NS case)                |                |                    | 93              |       |

Shag

| Month   | Year | Peak <1km | count | Peak count 2km | 1- Peak count <2km |
|---------|------|-----------|-------|----------------|--------------------|
| Nov-Feb | 1    | 38        |       |                |                    |
| Oct-Feb | 2    | 72        |       |                |                    |
| Nov-Feb | 3    |           |       | 48             | 73                 |

Slavonian grebe

| Distance band                       | Survey period  | Peak month | Peak count | Average of peak count | Average number Oct/Nov to Mar (average peak) |
|-------------------------------------|----------------|------------|------------|-----------------------|----------------------------------------------|
| 0 – 500 m                           | Yr 1 - 2020/21 | Feb        | 7          |                       | 3.45                                         |
|                                     | Yr 2 - 2021/22 | Dec/Feb    | 5          | 5.67                  | 1.85                                         |
|                                     | Yr 3 - 2023/24 | March      | 5          |                       | 1.125                                        |
| 0 – 1 km                            | Yr 1 - 2020/21 | Feb        | 7          |                       | 3.55                                         |
|                                     | Yr 2 - 2021/22 | Dec/Feb    | 5          | 5.67                  | 2.05                                         |
|                                     | Yr 3 - 2023/24 | Nov        | 5          |                       | 1.625                                        |
| 0 – 2 km                            | Yr 1 - 2020/21 | Feb        | 7          |                       | 3.55                                         |
|                                     | Yr 2 - 2021/22 | Dec/Feb    | 5          | 5.67                  | 2.05                                         |
|                                     | Yr 3 - 2023/24 | March      | 5          |                       | 1.625                                        |
| Average peak count (Applicant case) |                |            |            |                       |                                              |
| Peak Count (NS case)                |                |            |            |                       |                                              |

RTD nonbreeding

| Month   | Year | Peak <1km | count | Peak count 2km | 1- Peak count <2km |
|---------|------|-----------|-------|----------------|--------------------|
| Nov-Mar | 1    | 2         |       | 0              | 2                  |
| Oct-Mar | 2    | 2         |       | 1              | 2                  |
| Oct-Mar | 3    | 1         |       | 1              | 1                  |

RTD breeding

| Month    | Year | Peak <1km | count | Peak count 2km | 1- Peak count <2km |
|----------|------|-----------|-------|----------------|--------------------|
| Apr-Sept | 1    | 4         |       | 0              | 4                  |
|          | 2    | 2         |       | 2              | 2                  |

Scapa Flow Mortality

Great northern diver

| Displacement level | Mortality level |        |        |        |        |        |        |       |       |       |       |       |       |       |      |       |       |       |       |       |       |      |       |
|--------------------|-----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|
|                    | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50%  | 1%     | 2%    | 3%    | 4%    | 5%    | 10%   | 15%   | 20%   | 30%  | 40%   | 50%   | 60%   | 70%   | 80%   | 90%   | 100% |       |
|                    | 0               | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0    |       |
| 0%                 | 0               | 0      | 0.0033 | 0.0066 | 0.0099 | 0.0132 | 0.0165 | 0.033 | 0.066 | 0.099 | 0.132 | 0.165 | 0.33  | 0.495 | 0.66 | 0.99  | 1.32  | 1.65  | 1.98  | 2.31  | 2.64  | 2.97 | 3.3   |
| 10%                | 0               | 0      | 0.0066 | 0.0132 | 0.0198 | 0.0264 | 0.033  | 0.066 | 0.132 | 0.198 | 0.264 | 0.33  | 0.66  | 0.99  | 1.32 | 1.98  | 2.64  | 3.3   | 3.96  | 4.62  | 5.28  | 5.94 | 6.6   |
| 20%                | 0               | 0.0099 | 0.0198 | 0.0297 | 0.0396 | 0.0495 | 0.099  | 0.198 | 0.297 | 0.396 | 0.495 | 0.99  | 1.485 | 1.98  | 2.97 | 3.96  | 4.95  | 5.94  | 6.93  | 7.92  | 8.91  | 9.9  | 10.9  |
| 30%                | 0               | 0.0132 | 0.0264 | 0.0396 | 0.0528 | 0.066  | 0.132  | 0.264 | 0.396 | 0.528 | 0.66  | 1.32  | 1.98  | 2.64  | 3.96 | 5.28  | 6.6   | 7.92  | 9.24  | 10.56 | 11.88 | 13.2 | 14.56 |
| 40%                | 0               | 0.0165 | 0.033  | 0.0495 | 0.066  | 0.0825 | 0.165  | 0.33  | 0.495 | 0.66  | 0.825 | 1.65  | 2.475 | 3.3   | 4.95 | 6.6   | 8.25  | 9.9   | 11.55 | 13.2  | 14.85 | 16.5 | 18.15 |
| 50%                | 0               | 0.0198 | 0.0396 | 0.0594 | 0.0792 | 0.099  | 0.198  | 0.396 | 0.594 | 0.792 | 0.99  | 1.98  | 2.97  | 3.96  | 5.94 | 7.92  | 9.9   | 11.88 | 13.86 | 15.84 | 17.82 | 19.8 | 21.78 |
| 60%                | 0               | 0.0231 | 0.0462 | 0.0693 | 0.0924 | 0.1155 | 0.231  | 0.462 | 0.693 | 0.924 | 1.155 | 2.31  | 3.465 | 4.62  | 6.93 | 9.24  | 11.55 | 13.86 | 16.17 | 18.48 | 20.79 | 23.1 | 25.41 |
| 70%                | 0               | 0.0264 | 0.0528 | 0.0792 | 0.1056 | 0.132  | 0.264  | 0.528 | 0.792 | 1.056 | 1.32  | 2.64  | 3.96  | 5.28  | 7.92 | 10.56 | 13.2  | 15.84 | 18.48 | 21.12 | 23.76 | 26.4 | 29.04 |
| 80%                | 0               | 0.0297 | 0.0594 | 0.0891 | 0.1188 | 0.1485 | 0.297  | 0.594 | 0.891 | 1.188 | 1.485 | 2.97  | 4.455 | 5.94  | 8.91 | 11.88 | 14.85 | 17.82 | 20.79 | 23.76 | 26.73 | 29.7 | 32.67 |
| 90%                | 0               | 0.033  | 0.066  | 0.099  | 0.132  | 0.165  | 0.33   | 0.66  | 0.99  | 1.32  | 1.65  | 3.3   | 4.95  | 6.6   | 9.9  | 13.2  | 16.5  | 19.8  | 23.1  | 26.4  | 29.7  | 33   | 36.3  |

Red-throated diver

| Displacement level | Mortality level |        |        |        |        |        |        |       |       |       |       |       |       |       |      |      |      |      |      |      |      |      |     |
|--------------------|-----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-----|
|                    | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50%  | 1%     | 2%    | 3%    | 4%    | 5%    | 10%   | 15%   | 20%   | 30%  | 40%  | 50%  | 60%  | 70%  | 80%  | 90%  | 100% |     |
|                    | 0               | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |     |
| 0%                 | 0               | 0      | 0.0003 | 0.0006 | 0.0009 | 0.0012 | 0.0015 | 0.003 | 0.006 | 0.009 | 0.012 | 0.015 | 0.03  | 0.045 | 0.06 | 0.09 | 0.12 | 0.15 | 0.18 | 0.21 | 0.24 | 0.27 | 0.3 |
| 10%                | 0               | 0.0006 | 0.0012 | 0.0018 | 0.0024 | 0.003  | 0.006  | 0.012 | 0.018 | 0.024 | 0.03  | 0.06  | 0.09  | 0.12  | 0.18 | 0.24 | 0.3  | 0.36 | 0.42 | 0.48 | 0.54 | 0.6  |     |
| 20%                | 0               | 0.0009 | 0.0018 | 0.0027 | 0.0036 | 0.0045 | 0.009  | 0.018 | 0.027 | 0.036 | 0.045 | 0.09  | 0.135 | 0.18  | 0.27 | 0.36 | 0.45 | 0.54 | 0.63 | 0.72 | 0.81 | 0.9  |     |
| 30%                | 0               | 0.0012 | 0.0024 | 0.0036 | 0.0048 | 0.006  | 0.012  | 0.024 | 0.036 | 0.048 | 0.06  | 0.12  | 0.18  | 0.24  | 0.36 | 0.48 | 0.6  | 0.72 | 0.84 | 0.96 | 1.08 | 1.2  |     |
| 40%                | 0               | 0.0015 | 0.003  | 0.0045 | 0.006  | 0.0075 | 0.015  | 0.03  | 0.045 | 0.06  | 0.075 | 0.15  | 0.225 | 0.3   | 0.45 | 0.6  | 0.75 | 0.9  | 1.05 | 1.2  | 1.35 | 1.5  |     |
| 50%                | 0               | 0.0018 | 0.0036 | 0.0054 | 0.0072 | 0.009  | 0.018  | 0.036 | 0.054 | 0.072 | 0.09  | 0.18  | 0.27  | 0.36  | 0.54 | 0.72 | 0.9  | 1.08 | 1.26 | 1.44 | 1.62 | 1.8  |     |
| 60%                | 0               | 0.0021 | 0.0042 | 0.0063 | 0.0084 | 0.0105 | 0.021  | 0.042 | 0.063 | 0.084 | 0.105 | 0.21  | 0.315 | 0.42  | 0.63 | 0.84 | 1.05 | 1.26 | 1.47 | 1.68 | 1.89 | 2.1  |     |
| 70%                | 0               | 0.0024 | 0.0048 | 0.0072 | 0.0096 | 0.012  | 0.024  | 0.048 | 0.072 | 0.096 | 0.12  | 0.24  | 0.36  | 0.48  | 0.72 | 0.96 | 1.2  | 1.44 | 1.68 | 1.92 | 2.16 | 2.4  |     |
| 80%                | 0               | 0.0027 | 0.0054 | 0.0081 | 0.0108 | 0.0135 | 0.027  | 0.054 | 0.081 | 0.108 | 0.135 | 0.27  | 0.405 | 0.54  | 0.81 | 1.08 | 1.35 | 1.62 | 1.89 | 2.16 | 2.43 | 2.7  |     |
| 90%                | 0               | 0.003  | 0.006  | 0.009  | 0.012  | 0.015  | 0.03   | 0.06  | 0.09  | 0.12  | 0.15  | 0.3   | 0.45  | 0.6   | 0.9  | 1.2  | 1.5  | 1.8  | 2.1  | 2.4  | 2.7  | 3    |     |
| 100%               | 0               | 0.003  | 0.006  | 0.009  | 0.012  | 0.015  | 0.03   | 0.06  | 0.09  | 0.12  | 0.15  | 0.3   | 0.45  | 0.6   | 0.9  | 1.2  | 1.5  | 1.8  | 2.1  | 2.4  | 2.7  | 3    |     |

Black-throated diver

| Displacement level | Mortality level |        |        |        |        |        |       |        |        |        |        |        |      |      |      |      |      |      |       |       |       |       |  |
|--------------------|-----------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|-------|-------|-------|-------|--|
|                    | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50%  | 1%    | 2%     | 3%     | 4%     | 5%     | 10%    | 15%  | 20%  | 30%  | 40%  | 50%  | 60%  | 70%   | 80%   | 90%   | 100%  |  |
|                    | 0               | 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |  |
| 0%                 | 0               | 0.0015 | 0.0030 | 0.0045 | 0.0060 | 0.0075 | 0.015 | 0.0300 | 0.0450 | 0.0600 | 0.0750 | 0.1500 | 0.23 | 0.30 | 0.45 | 0.60 | 0.75 | 0.90 | 1.05  | 1.20  | 1.35  | 1.50  |  |
| 10%                | 0               | 0.0030 | 0.0060 | 0.0090 | 0.0120 | 0.0150 | 0.030 | 0.0600 | 0.0900 | 0.1200 | 0.1500 | 0.3000 | 0.45 | 0.60 | 0.90 | 1.20 | 1.50 | 1.80 | 2.10  | 2.40  | 2.70  | 3.00  |  |
| 20%                | 0               | 0.0045 | 0.0090 | 0.0135 | 0.0180 | 0.0225 | 0.045 | 0.0900 | 0.1350 | 0.1800 | 0.2250 | 0.4500 | 0.68 | 0.90 | 1.35 | 1.80 | 2.25 | 2.70 | 3.15  | 3.60  | 4.05  | 4.50  |  |
| 30%                | 0               | 0.0060 | 0.0120 | 0.0180 | 0.0240 | 0.0300 | 0.060 | 0.1200 | 0.1800 | 0.2400 | 0.3000 | 0.6000 | 0.90 | 1.20 | 1.80 | 2.40 | 3.00 | 3.60 | 4.20  | 4.80  | 5.40  | 6.00  |  |
| 40%                | 0               | 0.0075 | 0.0150 | 0.0225 | 0.0300 | 0.0375 | 0.075 | 0.1500 | 0.2250 | 0.3000 | 0.3750 | 0.7500 | 1.13 | 1.50 | 2.25 | 3.00 | 3.75 | 4.50 | 5.25  | 6.00  | 6.75  | 7.50  |  |
| 50%                | 0               | 0.0090 | 0.0180 | 0.0270 | 0.0360 | 0.0450 | 0.090 | 0.1800 | 0.2700 | 0.3600 | 0.4500 | 0.9000 | 1.35 | 1.80 | 2.70 | 3.60 | 4.50 | 5.40 | 6.30  | 7.20  | 8.10  | 9.00  |  |
| 60%                | 0               | 0.0105 | 0.0210 | 0.0315 | 0.0420 | 0.0525 | 0.105 | 0.2100 | 0.3150 | 0.4200 | 0.5250 | 1.0500 | 1.58 | 2.10 | 3.15 | 4.20 | 5.25 | 6.30 | 7.35  | 8.40  | 9.45  | 10.50 |  |
| 70%                | 0               | 0.0120 | 0.0240 | 0.0360 | 0.0480 | 0.0600 | 0.120 | 0.2400 | 0.3600 | 0.4800 | 0.6000 | 1.2000 | 1.80 | 2.40 | 3.60 | 4.80 | 6.00 | 7.20 | 8.40  | 9.60  | 10.80 | 12.00 |  |
| 80%                | 0               | 0.0135 | 0.0270 | 0.0405 | 0.0540 | 0.0675 | 0.135 | 0.2700 | 0.4050 | 0.5400 | 0.6750 | 1.3500 | 2.03 | 2.70 | 4.05 | 5.40 | 6.75 | 8.10 | 9.45  | 10.80 | 12.15 | 13.50 |  |
| 90%                | 0               | 0.0150 | 0.0300 | 0.0450 | 0.0600 | 0.0750 | 0.150 | 0.3000 | 0.4500 | 0.6000 | 0.7500 | 1.5000 | 2.25 | 3.00 | 4.50 | 6.00 | 7.50 | 9.00 | 10.50 | 12.00 | 13.50 | 15    |  |

Long-tailed duck

| Displacement level | Mortality level |         |         |         |         |         |        |        |         |         |        |        |        |        |         |         |        |         |         |         |         |         |        |
|--------------------|-----------------|---------|---------|---------|---------|---------|--------|--------|---------|---------|--------|--------|--------|--------|---------|---------|--------|---------|---------|---------|---------|---------|--------|
|                    | 0%              | 0.10%   | 0.20%   | 0.30%   | 0.40%   | 0.50%   | 1%     | 2%     | 3%      | 4%      | 5%     | 10%    | 15%    | 20%    | 30%     | 40%     | 50%    | 60%     | 70%     | 80%     | 90%     | 100%    |        |
|                    | 0               | 0       | 0       | 0       | 0       | 0       | 0      | 0      | 0       | 0       | 0      | 0      | 0      | 0      | 0       | 0       | 0      | 0       | 0       | 0       | 0       | 0       |        |
| 0%                 | 0               | 0       | 0.03876 | 0.07752 | 0.11628 | 0.15504 | 0.1938 | 0.3876 | 0.7752  | 1.1628  | 1.5504 | 1.938  | 3.876  | 5.814  | 7.752   | 11.628  | 15.504 | 19.38   | 23.256  | 27.132  | 31.008  | 34.884  | 38.76  |
| 20%                | 0               | 0.07752 | 0.15504 | 0.23256 | 0.31008 | 0.3876  | 0.7752 | 1.5504 | 2.3256  | 3.1008  | 3.876  | 7.752  | 11.628 | 15.504 | 23.256  | 31.008  | 38.76  | 46.512  | 54.264  | 62.016  | 69.768  | 77.52   |        |
| 30%                | 0               | 0.11628 | 0.23256 | 0.34884 | 0.46512 | 0.5814  | 1.1628 | 2.3256 | 3.4884  | 4.6512  | 5.814  | 11.628 | 17.442 | 23.256 | 31.008  | 46.512  | 62.016 | 77.52   | 93.024  | 108.528 | 124.032 | 139.536 | 155.04 |
| 40%                | 0               | 0.15504 | 0.31008 | 0.46512 | 0.62016 | 0.7752  | 1.5504 | 3.1008 | 4.6512  | 6.2016  | 7.752  | 15.504 | 23.256 | 31.008 | 46.512  | 62.016  | 77.52  | 93.024  | 108.528 | 124.032 | 139.536 | 155.04  |        |
| 50%                | 0               | 0.1938  | 0.3876  | 0.5814  | 0.7752  | 0.969   | 1.938  | 3.876  | 5.814   | 7.752   | 9.69   | 19.38  | 29.07  | 38.76  | 58.14   | 77.52   | 96.9   | 116.28  | 135.66  | 155.04  | 174.42  | 193.8   |        |
| 60%                | 0               | 0.23256 | 0.46512 | 0.69768 | 0.93024 | 1.1628  | 2.3256 | 4.6512 | 6.9768  | 9.3024  | 11.628 | 23.256 | 34.884 | 46.512 | 69.768  | 93.024  | 116.28 | 139.536 | 162.792 | 186.048 | 209.304 | 232.56  |        |
| 70%                | 0               | 0.27132 | 0.54264 | 0.81396 | 1.08528 | 1.3566  | 2.7132 | 5.4264 | 8.1396  | 10.8528 | 13.566 | 27.132 | 40.698 | 54.264 | 81.396  | 108.528 | 135.66 | 162.792 | 189.924 | 217.056 | 244.188 | 271.32  |        |
| 80%                | 0               | 0.31008 | 0.62016 | 0.93024 | 1.24032 | 1.5504  | 3.1008 | 6.2016 | 9.3024  | 12.4032 | 15.504 | 31.008 | 46.512 | 62.016 | 93.024  | 124.032 | 155.04 | 186.048 | 217.056 | 248.064 | 279.072 | 310.08  |        |
| 90%                | 0               | 0.34884 | 0.69768 | 1.04652 | 1.39536 | 1.7442  | 3.4884 | 6.9768 | 10.4652 | 13.9536 | 17.442 | 34.884 | 52.326 | 69.768 | 104.652 | 139.536 | 174.42 | 209.304 | 244.188 | 279.072 | 313.956 | 348.84  |        |
| 100%               | 0               | 0.3876  | 0.7752  | 1.1628  | 1.5504  | 1.938   | 3.876  | 7.752  | 11.628  | 15.504  | 19.38  | 38.76  | 58.14  | 77.52  | 116.28  | 155.04  | 193.8  | 232.56  | 271.32  | 310.08  | 348.84  | 387.6   |        |

Eider

| Displacement level | Mortality level |        |        |        |        |       |       |       |       |       |      |      |       |       |       |       |      |       |       |       |       |      |  |
|--------------------|-----------------|--------|--------|--------|--------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|--|
|                    | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50% | 1%    | 2%    | 3%    | 4%    | 5%   | 10%  | 15%   | 20%   | 30%   | 40%   | 50%  | 60%   | 70%   | 80%   | 90%   | 100% |  |
|                    | 0               | 0      | 0      | 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |  |
| 0%                 | 0               | 0.0092 | 0.0184 | 0.0276 | 0.0368 | 0.046 | 0.092 | 0.184 | 0.276 | 0.368 | 0.46 | 0.92 | 1.38  | 1.84  | 2.76  | 3.68  | 4.6  | 5.52  | 6.44  | 7.36  | 8.28  | 9.2  |  |
| 10%                | 0               | 0.0184 | 0.0368 | 0.0552 | 0.0736 | 0.092 | 0.184 | 0.368 | 0.552 | 0.736 | 0.92 | 1.84 | 2.76  | 3.68  | 5.52  | 7.36  | 9.2  | 11.04 | 12.88 | 14.72 | 16.56 | 18.4 |  |
| 20%                | 0               | 0.0276 | 0.0552 | 0.0828 | 0.1104 | 0.138 | 0.276 | 0.552 | 0.828 | 1.104 | 1.38 | 2.76 | 4.14  | 5.52  | 8.28  | 11.04 | 13.8 | 16.56 | 19.32 | 22.08 | 24.84 | 27.6 |  |
| 30%                | 0               | 0.0368 | 0.0736 | 0.1104 | 0.1472 | 0.184 | 0.368 | 0.736 | 1.104 | 1.472 | 1.84 | 3.68 | 5.52  | 7.36  | 11.04 | 14.72 | 18.4 | 22.08 | 25.76 | 29.44 | 33.12 | 36.8 |  |
| 40%                | 0               | 0.046  | 0.092  | 0.138  | 0.184  | 0.23  | 0.46  | 0.92  | 1.38  | 1.84  | 2.3  | 4.6  | 6.9   | 9.2   | 13.8  | 18.4  | 23   | 27.6  | 32.2  | 36.8  | 41.4  | 46   |  |
| 50%                | 0               | 0.0552 | 0.1104 | 0.1656 | 0.2208 | 0.276 | 0.552 | 1.104 | 1.656 | 2.208 | 2.76 | 5.52 | 8.28  | 11.04 | 16.56 | 22.08 | 27.6 | 33.12 | 38.64 | 44.16 | 49.68 | 55.2 |  |
| 60%                | 0               | 0.0644 | 0.1288 | 0.1932 | 0.2576 | 0.322 | 0.644 | 1.288 | 1.932 | 2.576 | 3.22 | 6.44 | 9.66  | 12.88 | 19.32 | 25.76 | 32.2 | 38.64 | 45.08 | 51.52 | 57.96 | 64.4 |  |
| 70%                | 0               | 0.0736 | 0.1472 | 0.2208 | 0.2944 | 0.368 | 0.736 | 1.472 | 2.208 | 2.944 | 3.68 | 7.36 | 11.04 | 14.72 | 22.08 | 29.44 | 36.8 | 44.16 | 51.52 | 58.88 | 66.24 | 73.6 |  |
| 80%                | 0               | 0.0828 | 0.1656 | 0.2484 | 0.3312 | 0.414 | 0.828 | 1.656 | 2.484 | 3.312 | 4.14 | 8.28 | 12.42 | 16.56 | 24.84 | 33.12 | 41.4 | 49.68 | 57.96 | 66.24 | 74.52 | 82.8 |  |
| 90%                | 0               | 0.092  | 0.184  | 0.276  | 0.368  | 0.46  | 0.92  | 1.84  | 2.76  | 3.68  | 4.6  | 9.2  | 13.8  | 18.4  | 27.6  | 36.8  | 46   | 55.2  | 64.4  | 73.6  | 82.8  | 92   |  |



### North Orkney Mortality

## Great northern diver

|                    |      | Mortality level |       |       |       |       |       |        |        |        |        |        |       |      |      |      |      |      |      |      |      |      |      |
|--------------------|------|-----------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|------|------|------|------|------|------|------|------|------|------|
| Displacement level |      | 0%              | 0.10% | 0.20% | 0.30% | 0.40% | 0.50% | 1%     | 2%     | 3%     | 4%     | 5%     | 10%   | 15%  | 20%  | 30%  | 40%  | 50%  | 60%  | 70%  | 80%  | 90%  | 100% |
|                    | 0%   | 0               | 0     | 0     | 0     | 0     | 0     | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|                    | 10%  | 0               | 5E-04 | 9E-04 | 0.001 | 0.002 | 0.002 | 0.0046 | 0.0092 | 0.0138 | 0.0184 | 0.0230 | 0.046 | 0.07 | 0.09 | 0.14 | 0.18 | 0.23 | 0.28 | 0.32 | 0.37 | 0.41 | 0.46 |
|                    | 20%  | 0               | 9E-04 | 0.002 | 0.003 | 0.004 | 0.005 | 0.0092 | 0.0184 | 0.0276 | 0.0368 | 0.0460 | 0.092 | 0.14 | 0.18 | 0.28 | 0.37 | 0.46 | 0.55 | 0.64 | 0.74 | 0.83 | 0.92 |
|                    | 30%  | 0               | 0.001 | 0.003 | 0.004 | 0.006 | 0.007 | 0.0138 | 0.0276 | 0.0414 | 0.0552 | 0.0690 | 0.138 | 0.21 | 0.28 | 0.41 | 0.55 | 0.69 | 0.83 | 0.97 | 1.1  | 1.24 | 1.38 |
|                    | 40%  | 0               | 0.002 | 0.004 | 0.006 | 0.007 | 0.009 | 0.0184 | 0.0368 | 0.0552 | 0.0736 | 0.0920 | 0.184 | 0.28 | 0.37 | 0.55 | 0.74 | 0.92 | 1.1  | 1.29 | 1.47 | 1.66 | 1.84 |
|                    | 50%  | 0               | 0.002 | 0.005 | 0.007 | 0.009 | 0.012 | 0.0230 | 0.0460 | 0.0690 | 0.0920 | 0.1150 | 0.23  | 0.35 | 0.46 | 0.69 | 0.92 | 1.15 | 1.38 | 1.61 | 1.84 | 2.07 | 2.3  |
|                    | 60%  | 0               | 0.003 | 0.006 | 0.008 | 0.011 | 0.014 | 0.0276 | 0.0552 | 0.0828 | 0.1104 | 0.1380 | 0.276 | 0.41 | 0.55 | 0.83 | 1.1  | 1.38 | 1.66 | 1.93 | 2.21 | 2.48 | 2.76 |
|                    | 70%  | 0               | 0.003 | 0.006 | 0.01  | 0.013 | 0.016 | 0.0322 | 0.0644 | 0.0966 | 0.1288 | 0.1610 | 0.322 | 0.48 | 0.64 | 0.97 | 1.29 | 1.61 | 1.93 | 2.25 | 2.58 | 2.9  | 3.22 |
|                    | 80%  | 0               | 0.004 | 0.007 | 0.011 | 0.015 | 0.018 | 0.0368 | 0.0736 | 0.1104 | 0.1472 | 0.1840 | 0.368 | 0.55 | 0.74 | 1.1  | 1.47 | 1.84 | 2.21 | 2.58 | 2.94 | 3.31 | 3.68 |
|                    | 90%  | 0               | 0.004 | 0.008 | 0.012 | 0.017 | 0.021 | 0.0414 | 0.0828 | 0.1242 | 0.1656 | 0.2070 | 0.414 | 0.62 | 0.83 | 1.24 | 1.66 | 2.07 | 2.48 | 2.9  | 3.31 | 3.73 | 4.14 |
|                    | 100% | 0               | 0.005 | 0.009 | 0.014 | 0.018 | 0.023 | 0.0460 | 0.0920 | 0.1380 | 0.1840 | 0.2300 | 0.46  | 0.69 | 0.92 | 1.38 | 1.84 | 2.3  | 2.76 | 3.22 | 3.68 | 4.14 | 4.6  |

### Red-throated diver

|                    |      | Mortality level |       |       |       |       |       |        |        |        |        |        |       |      |      |      |      |      |      |      |      |      |      |
|--------------------|------|-----------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|------|------|------|------|------|------|------|------|------|------|
| Displacement level |      | 0%              | 0.10% | 0.20% | 0.30% | 0.40% | 0.50% | 1%     | 2%     | 3%     | 4%     | 5%     | 10%   | 15%  | 20%  | 30%  | 40%  | 50%  | 60%  | 70%  | 80%  | 90%  | 100% |
|                    | 0%   | 0               | 0     | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|                    | 10%  | 0               | 3E-05 | 6E-05 | 9E-05 | 1E-04 | 2E-04 | 0.0003 | 0.0006 | 0.0009 | 0.0012 | 0.0015 | 0.003 | 0    | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |
|                    | 20%  | 0               | 6E-05 | 1E-04 | 2E-04 | 2E-04 | 3E-04 | 0.0006 | 0.0012 | 0.0018 | 0.0024 | 0.003  | 0.006 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.04 | 0.05 | 0.05 | 0.06 |
|                    | 30%  | 0               | 9E-05 | 2E-04 | 3E-04 | 4E-04 | 5E-04 | 0.0009 | 0.0018 | 0.0027 | 0.0036 | 0.0045 | 0.009 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|                    | 40%  | 0               | 1E-04 | 2E-04 | 4E-04 | 5E-04 | 6E-04 | 0.0012 | 0.0024 | 0.0036 | 0.0048 | 0.006  | 0.012 | 0.02 | 0.02 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.1  | 0.11 | 0.12 |
|                    | 50%  | 0               | 2E-04 | 3E-04 | 5E-04 | 6E-04 | 8E-04 | 0.0015 | 0.003  | 0.0045 | 0.006  | 0.0075 | 0.015 | 0.02 | 0.03 | 0.05 | 0.06 | 0.08 | 0.09 | 0.11 | 0.12 | 0.14 | 0.15 |
|                    | 60%  | 0               | 2E-04 | 4E-04 | 5E-04 | 7E-04 | 9E-04 | 0.0018 | 0.0036 | 0.0054 | 0.0072 | 0.009  | 0.018 | 0.03 | 0.04 | 0.05 | 0.07 | 0.09 | 0.11 | 0.13 | 0.14 | 0.16 | 0.18 |
|                    | 70%  | 0               | 2E-04 | 4E-04 | 6E-04 | 8E-04 | 0.001 | 0.0021 | 0.0042 | 0.0063 | 0.0084 | 0.0105 | 0.021 | 0.03 | 0.04 | 0.06 | 0.08 | 0.11 | 0.13 | 0.15 | 0.17 | 0.19 | 0.21 |
|                    | 80%  | 0               | 2E-04 | 5E-04 | 7E-04 | 1E-03 | 0.001 | 0.0024 | 0.0048 | 0.0072 | 0.0096 | 0.012  | 0.024 | 0.04 | 0.05 | 0.07 | 0.1  | 0.12 | 0.14 | 0.17 | 0.19 | 0.22 | 0.24 |
|                    | 90%  | 0               | 3E-04 | 5E-04 | 8E-04 | 0.001 | 0.001 | 0.0027 | 0.0054 | 0.0081 | 0.0108 | 0.0135 | 0.027 | 0.04 | 0.05 | 0.08 | 0.11 | 0.14 | 0.16 | 0.19 | 0.22 | 0.24 | 0.27 |
|                    | 100% | 0               | 3E-04 | 6E-04 | 9E-04 | 0.001 | 0.002 | 0.003  | 0.006  | 0.009  | 0.012  | 0.015  | 0.03  | 0.05 | 0.06 | 0.09 | 0.12 | 0.15 | 0.18 | 0.21 | 0.24 | 0.27 | 0.3  |

## Slavonian grebe

|                    |      | Mortality level |        |        |        |        |        |       |        |        |        |        |        |      |      |      |      |      |      |      |      |      |      |
|--------------------|------|-----------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|------|
| Displacement level |      | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50%  | 1%    | 2%     | 3%     | 4%     | 5%     | 10%    | 15%  | 20%  | 30%  | 40%  | 50%  | 60%  | 70%  | 80%  | 90%  | 100% |
|                    | 0%   | 0               | 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|                    | 10%  | 0               | 0.0001 | 0.0001 | 0.0002 | 0.0002 | 0.0003 | 0.001 | 0.0011 | 0.0017 | 0.0023 | 0.0028 | 0.0057 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.05 | 0.06 |
|                    | 20%  | 0               | 0.0001 | 0.0002 | 0.0003 | 0.0005 | 0.0006 | 0.001 | 0.0023 | 0.0034 | 0.0045 | 0.0057 | 0.0113 | 0.02 | 0.02 | 0.03 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 |
|                    | 30%  | 0               | 0.0002 | 0.0003 | 0.0005 | 0.0007 | 0.0009 | 0.002 | 0.0034 | 0.0051 | 0.0068 | 0.0085 | 0.0170 | 0.03 | 0.03 | 0.05 | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.15 | 0.17 |
|                    | 40%  | 0               | 0.0002 | 0.0005 | 0.0007 | 0.0009 | 0.0011 | 0.002 | 0.0045 | 0.0068 | 0.0091 | 0.0113 | 0.0227 | 0.03 | 0.05 | 0.07 | 0.09 | 0.11 | 0.14 | 0.16 | 0.18 | 0.20 | 0.23 |
|                    | 50%  | 0               | 0.0003 | 0.0006 | 0.0009 | 0.0011 | 0.0014 | 0.003 | 0.0057 | 0.0085 | 0.0113 | 0.0142 | 0.0284 | 0.04 | 0.06 | 0.09 | 0.11 | 0.14 | 0.17 | 0.20 | 0.23 | 0.26 | 0.28 |
|                    | 60%  | 0               | 0.0003 | 0.0007 | 0.0010 | 0.0014 | 0.0017 | 0.003 | 0.0068 | 0.0102 | 0.0136 | 0.0170 | 0.0340 | 0.05 | 0.07 | 0.10 | 0.14 | 0.17 | 0.20 | 0.24 | 0.27 | 0.31 | 0.34 |
|                    | 70%  | 0               | 0.0004 | 0.0008 | 0.0012 | 0.0016 | 0.0020 | 0.004 | 0.0079 | 0.0119 | 0.0159 | 0.0198 | 0.0397 | 0.06 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 |
|                    | 80%  | 0               | 0.0005 | 0.0009 | 0.0014 | 0.0018 | 0.0023 | 0.005 | 0.0091 | 0.0136 | 0.0181 | 0.0227 | 0.0454 | 0.07 | 0.09 | 0.14 | 0.18 | 0.23 | 0.27 | 0.32 | 0.36 | 0.41 | 0.45 |
|                    | 90%  | 0               | 0.0005 | 0.0010 | 0.0015 | 0.0020 | 0.0026 | 0.005 | 0.0102 | 0.0153 | 0.0204 | 0.0255 | 0.0510 | 0.08 | 0.10 | 0.15 | 0.20 | 0.26 | 0.31 | 0.36 | 0.41 | 0.46 | 0.51 |
|                    | 100% | 0               | 0.0006 | 0.0011 | 0.0017 | 0.0023 | 0.0028 | 0.006 | 0.0113 | 0.0170 | 0.0227 | 0.0284 | 0.0567 | 0.09 | 0.11 | 0.17 | 0.23 | 0.28 | 0.34 | 0.40 | 0.45 | 0.51 | 1    |

## Velvet scoter

[illegible]

## Orkney Mainland Moors Mortality

### Red-throated diver

|                    |      | Mortality level |       |       |       |       |       |       |       |       |       |       |     |     |     |     |     |     |     |     |     |     |      |
|--------------------|------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Displacement level |      | 0%              | 0.10% | 0.20% | 0.30% | 0.40% | 0.50% | 1%    | 2%    | 3%    | 4%    | 5%    | 10% | 15% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
|                    | 0%   | 0               | 0     | 0     | 0     | 0     | 0     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    |
|                    | 10%  | 0               | 2E-04 | 4E-04 | 6E-04 | 8E-04 | 0.001 | 0.002 | 0.004 | 0.006 | 0.008 | 0.010 | 0   | 0   | 0   | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2  |
|                    | 20%  | 0               | 4E-04 | 8E-04 | 0.001 | 0.002 | 0.002 | 0.004 | 0.008 | 0.012 | 0.016 | 0.020 | 0   | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4  |
|                    | 30%  | 0               | 6E-04 | 0.001 | 0.002 | 0.002 | 0.003 | 0.006 | 0.012 | 0.018 | 0.024 | 0.030 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6  |
|                    | 40%  | 0               | 8E-04 | 0.002 | 0.002 | 0.003 | 0.004 | 0.008 | 0.016 | 0.024 | 0.032 | 0.040 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8  |
|                    | 50%  | 0               | 0.001 | 0.002 | 0.003 | 0.004 | 0.005 | 0.010 | 0.020 | 0.030 | 0.040 | 0.050 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1    |
|                    | 60%  | 0               | 0.001 | 0.002 | 0.004 | 0.005 | 0.006 | 0.012 | 0.024 | 0.036 | 0.048 | 0.060 | 0.1 | 0.2 | 0.2 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1   | 1.1 | 1.2  |
|                    | 70%  | 0               | 0.001 | 0.003 | 0.004 | 0.006 | 0.007 | 0.014 | 0.028 | 0.042 | 0.056 | 0.070 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 1   | 1.1 | 1.3 | 1.4  |
|                    | 80%  | 0               | 0.002 | 0.003 | 0.005 | 0.006 | 0.008 | 0.016 | 0.032 | 0.048 | 0.064 | 0.080 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.8 | 1   | 1.1 | 1.3 | 1.4 | 1.6  |
|                    | 90%  | 0               | 0.002 | 0.004 | 0.005 | 0.007 | 0.009 | 0.018 | 0.036 | 0.054 | 0.072 | 0.090 | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.6 | 1.8  |
|                    | 100% | 0               | 0.002 | 0.004 | 0.006 | 0.008 | 0.01  | 0.020 | 0.040 | 0.060 | 0.080 | 0.100 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 1   | 1.2 | 1.4 | 1.6 | 1.8 | 2    |

Hoy Mortality

| Red-throated diver |      | Mortality level |        |        |        |        |       |       |       |       |       |      |      |      |      |      |      |     |      |      |      |      |      |  |
|--------------------|------|-----------------|--------|--------|--------|--------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-----|------|------|------|------|------|--|
| Displacement level |      | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50% | 1%    | 2%    | 3%    | 4%    | 5%   | 10%  | 15%  | 20%  | 30%  | 40%  | 50% | 60%  | 70%  | 80%  | 90%  | 100% |  |
|                    | 0%   | 0               | 0      | 0      | 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |  |
|                    | 10%  | 0               | 0.0002 | 0.0004 | 0.0006 | 0.0008 | 0.001 | 0.002 | 0.004 | 0.006 | 0.008 | 0.01 | 0.02 | 0.03 | 0.04 | 0.06 | 0.08 | 0.1 | 0.12 | 0.14 | 0.16 | 0.18 | 0.2  |  |
|                    | 20%  | 0               | 0.0004 | 0.0008 | 0.0012 | 0.0016 | 0.002 | 0.004 | 0.008 | 0.012 | 0.016 | 0.02 | 0.04 | 0.06 | 0.08 | 0.12 | 0.16 | 0.2 | 0.24 | 0.28 | 0.32 | 0.36 | 0.4  |  |
|                    | 30%  | 0               | 0.0006 | 0.0012 | 0.0018 | 0.0024 | 0.003 | 0.006 | 0.012 | 0.018 | 0.024 | 0.03 | 0.06 | 0.09 | 0.12 | 0.18 | 0.24 | 0.3 | 0.36 | 0.42 | 0.48 | 0.54 | 0.6  |  |
|                    | 40%  | 0               | 0.0008 | 0.0016 | 0.0024 | 0.0032 | 0.004 | 0.008 | 0.016 | 0.024 | 0.032 | 0.04 | 0.08 | 0.12 | 0.16 | 0.24 | 0.32 | 0.4 | 0.48 | 0.56 | 0.64 | 0.72 | 0.8  |  |
|                    | 50%  | 0               | 0.001  | 0.002  | 0.003  | 0.004  | 0.005 | 0.01  | 0.02  | 0.03  | 0.04  | 0.05 | 0.1  | 0.15 | 0.2  | 0.3  | 0.4  | 0.5 | 0.6  | 0.7  | 0.8  | 0.9  | 1    |  |
|                    | 60%  | 0               | 0.0012 | 0.0024 | 0.0036 | 0.0048 | 0.006 | 0.012 | 0.024 | 0.036 | 0.048 | 0.06 | 0.12 | 0.18 | 0.24 | 0.36 | 0.48 | 0.6 | 0.72 | 0.84 | 0.96 | 1.08 | 1.2  |  |
|                    | 70%  | 0               | 0.0014 | 0.0028 | 0.0042 | 0.0056 | 0.007 | 0.014 | 0.028 | 0.042 | 0.056 | 0.07 | 0.14 | 0.21 | 0.28 | 0.42 | 0.56 | 0.7 | 0.84 | 0.98 | 1.12 | 1.26 | 1.4  |  |
|                    | 80%  | 0               | 0.0016 | 0.0032 | 0.0048 | 0.0064 | 0.008 | 0.016 | 0.032 | 0.048 | 0.064 | 0.08 | 0.16 | 0.24 | 0.32 | 0.48 | 0.64 | 0.8 | 0.96 | 1.12 | 1.28 | 1.44 | 1.6  |  |
|                    | 90%  | 0               | 0.0018 | 0.0036 | 0.0054 | 0.0072 | 0.009 | 0.018 | 0.036 | 0.054 | 0.072 | 0.09 | 0.18 | 0.27 | 0.36 | 0.54 | 0.72 | 0.9 | 1.08 | 1.26 | 1.44 | 1.62 | 1.8  |  |
|                    | 100% | 0               | 0.002  | 0.004  | 0.006  | 0.008  | 0.01  | 0.02  | 0.04  | 0.06  | 0.08  | 0.1  | 0.2  | 0.3  | 0.4  | 0.6  | 0.8  | 1   | 1.2  | 1.4  | 1.6  | 1.8  | 2    |  |

| Arctic skua        |      |                 |        |       |        |       |        |       |      |       |      |       |      |       |     |      |     |      |     |      |     |      |      |  |
|--------------------|------|-----------------|--------|-------|--------|-------|--------|-------|------|-------|------|-------|------|-------|-----|------|-----|------|-----|------|-----|------|------|--|
|                    |      | Mortality level |        |       |        |       |        |       |      |       |      |       |      |       |     |      |     |      |     |      |     |      |      |  |
| Displacement level |      | 0%              | 0.10%  | 0.20% | 0.30%  | 0.40% | 0.50%  | 1%    | 2%   | 3%    | 4%   | 5%    | 10%  | 15%   | 20% | 30%  | 40% | 50%  | 60% | 70%  | 80% | 90%  | 100% |  |
|                    | 0%   | 0               | 0      | 0     | 0      | 0     | 0      | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0    |  |
|                    | 10%  | 0               | 0.0005 | 0.001 | 0.0015 | 0.002 | 0.0025 | 0.005 | 0.01 | 0.015 | 0.02 | 0.025 | 0.05 | 0.075 | 0.1 | 0.15 | 0.2 | 0.25 | 0.3 | 0.35 | 0.4 | 0.45 | 0.5  |  |
|                    | 20%  | 0               | 0.001  | 0.002 | 0.003  | 0.004 | 0.005  | 0.01  | 0.02 | 0.03  | 0.04 | 0.05  | 0.1  | 0.15  | 0.2 | 0.3  | 0.4 | 0.5  | 0.6 | 0.7  | 0.8 | 0.9  | 1    |  |
|                    | 30%  | 0               | 0.0015 | 0.003 | 0.0045 | 0.006 | 0.0075 | 0.015 | 0.03 | 0.045 | 0.06 | 0.075 | 0.15 | 0.225 | 0.3 | 0.45 | 0.6 | 0.75 | 0.9 | 1.05 | 1.2 | 1.35 | 1.5  |  |
|                    | 40%  | 0               | 0.002  | 0.004 | 0.006  | 0.008 | 0.01   | 0.02  | 0.04 | 0.06  | 0.08 | 0.1   | 0.2  | 0.3   | 0.4 | 0.6  | 0.8 | 1    | 1.2 | 1.4  | 1.6 | 1.8  | 2    |  |
|                    | 50%  | 0               | 0.0025 | 0.005 | 0.0075 | 0.01  | 0.0125 | 0.025 | 0.05 | 0.075 | 0.1  | 0.125 | 0.25 | 0.375 | 0.5 | 0.75 | 1   | 1.25 | 1.5 | 1.75 | 2   | 2.25 | 2.5  |  |
|                    | 60%  | 0               | 0.003  | 0.006 | 0.009  | 0.012 | 0.015  | 0.03  | 0.06 | 0.09  | 0.12 | 0.15  | 0.3  | 0.45  | 0.6 | 0.9  | 1.2 | 1.5  | 1.8 | 2.1  | 2.4 | 2.7  | 3    |  |
|                    | 70%  | 0               | 0.0035 | 0.007 | 0.0105 | 0.014 | 0.0175 | 0.035 | 0.07 | 0.105 | 0.14 | 0.175 | 0.35 | 0.525 | 0.7 | 1.05 | 1.4 | 1.75 | 2.1 | 2.45 | 2.8 | 3.15 | 3.5  |  |
|                    | 80%  | 0               | 0.004  | 0.008 | 0.012  | 0.016 | 0.02   | 0.04  | 0.08 | 0.12  | 0.16 | 0.2   | 0.4  | 0.6   | 0.8 | 1.2  | 1.6 | 2    | 2.4 | 2.8  | 3.2 | 3.6  | 4    |  |
|                    | 90%  | 0               | 0.0045 | 0.009 | 0.0135 | 0.018 | 0.0225 | 0.045 | 0.09 | 0.135 | 0.18 | 0.225 | 0.45 | 0.675 | 0.9 | 1.35 | 1.8 | 2.25 | 2.7 | 3.15 | 3.6 | 4.05 | 4.5  |  |
|                    | 100% | 0               | 0.005  | 0.01  | 0.015  | 0.02  | 0.025  | 0.05  | 0.1  | 0.15  | 0.2  | 0.25  | 0.5  | 0.75  | 1   | 1.5  | 2   | 2.5  | 3   | 3.5  | 4   | 4.5  | 5    |  |

| Atlantic Puffin    |      |                 |        |        |        |        |        |       |        |        |        |        |        |      |      |      |      |      |      |      |      |      |      |  |
|--------------------|------|-----------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|------|--|
|                    |      | Mortality level |        |        |        |        |        |       |        |        |        |        |        |      |      |      |      |      |      |      |      |      |      |  |
| Displacement level |      | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50%  | 1%    | 2%     | 3%     | 4%     | 5%     | 10%    | 15%  | 20%  | 30%  | 40%  | 50%  | 60%  | 70%  | 80%  | 90%  | 100% |  |
|                    | 0%   | 0               | 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |  |
|                    | 10%  | 0               | 0.0003 | 0.0006 | 0.0009 | 0.0012 | 0.0015 | 0.003 | 0.0060 | 0.0090 | 0.0120 | 0.0150 | 0.0300 | 0.05 | 0.06 | 0.09 | 0.12 | 0.15 | 0.18 | 0.21 | 0.24 | 0.27 | 0.30 |  |
|                    | 20%  | 0               | 0.0006 | 0.0012 | 0.0018 | 0.0024 | 0.0030 | 0.006 | 0.0120 | 0.0180 | 0.0240 | 0.0300 | 0.0600 | 0.09 | 0.12 | 0.18 | 0.24 | 0.30 | 0.36 | 0.42 | 0.48 | 0.54 | 0.60 |  |
|                    | 30%  | 0               | 0.0009 | 0.0018 | 0.0027 | 0.0036 | 0.0045 | 0.009 | 0.0180 | 0.0270 | 0.0360 | 0.0450 | 0.0900 | 0.14 | 0.18 | 0.27 | 0.36 | 0.45 | 0.54 | 0.63 | 0.72 | 0.81 | 0.90 |  |
|                    | 40%  | 0               | 0.0012 | 0.0024 | 0.0036 | 0.0048 | 0.0060 | 0.012 | 0.0240 | 0.0360 | 0.0480 | 0.0600 | 0.1200 | 0.18 | 0.24 | 0.36 | 0.48 | 0.60 | 0.72 | 0.84 | 0.96 | 1.08 | 1.20 |  |
|                    | 50%  | 0               | 0.0015 | 0.0030 | 0.0045 | 0.0060 | 0.0075 | 0.015 | 0.0300 | 0.0450 | 0.0600 | 0.0750 | 0.1500 | 0.23 | 0.30 | 0.45 | 0.60 | 0.75 | 0.90 | 1.05 | 1.20 | 1.35 | 1.50 |  |
|                    | 60%  | 0               | 0.0018 | 0.0036 | 0.0054 | 0.0072 | 0.0090 | 0.018 | 0.0360 | 0.0540 | 0.0720 | 0.0900 | 0.1800 | 0.27 | 0.36 | 0.54 | 0.72 | 0.90 | 1.08 | 1.26 | 1.44 | 1.62 | 1.80 |  |
|                    | 70%  | 0               | 0.0021 | 0.0042 | 0.0063 | 0.0084 | 0.0105 | 0.021 | 0.0420 | 0.0630 | 0.0840 | 0.1050 | 0.2100 | 0.32 | 0.42 | 0.63 | 0.84 | 1.05 | 1.26 | 1.47 | 1.68 | 1.89 | 2.10 |  |
|                    | 80%  | 0               | 0.0024 | 0.0048 | 0.0072 | 0.0096 | 0.0120 | 0.024 | 0.0480 | 0.0720 | 0.0960 | 0.1200 | 0.2400 | 0.36 | 0.48 | 0.72 | 0.96 | 1.20 | 1.44 | 1.68 | 1.92 | 2.16 | 2.40 |  |
|                    | 90%  | 0               | 0.0027 | 0.0054 | 0.0081 | 0.0108 | 0.0135 | 0.027 | 0.0540 | 0.0810 | 0.1080 | 0.1350 | 0.2700 | 0.41 | 0.54 | 0.81 | 1.08 | 1.35 | 1.62 | 1.89 | 2.16 | 2.43 | 2.70 |  |
|                    | 100% | 0               | 0.0030 | 0.0060 | 0.0090 | 0.0120 | 0.0150 | 0.030 | 0.0600 | 0.0900 | 0.1200 | 0.1500 | 0.3000 | 0.45 | 0.60 | 0.90 | 1.20 | 1.50 | 1.80 | 2.10 | 2.40 | 2.70 | 3    |  |

| Black-legged kittiwake |      | Mortality level |        |        |        |        |        |       |       |       |       |       |      |        |       |       |       |       |       |       |       |       |      |
|------------------------|------|-----------------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Displacement level     |      | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50%  | 1%    | 2%    | 3%    | 4%    | 5%    | 10%  | 15%    | 20%   | 30%   | 40%   | 50%   | 60%   | 70%   | 80%   | 90%   | 100% |
|                        | 0%   | 0               | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    |
|                        | 10%  | 0               | 0.0083 | 0.0166 | 0.0249 | 0.0332 | 0.0415 | 0.083 | 0.166 | 0.249 | 0.332 | 0.415 | 0.83 | 1.245  | 1.66  | 2.49  | 3.32  | 4.15  | 4.98  | 5.81  | 6.64  | 7.47  | 8.3  |
|                        | 20%  | 0               | 0.0166 | 0.0332 | 0.0498 | 0.0664 | 0.083  | 0.166 | 0.332 | 0.498 | 0.664 | 0.83  | 1.66 | 2.49   | 3.32  | 4.98  | 6.64  | 8.3   | 9.96  | 11.62 | 13.28 | 14.94 | 16.6 |
|                        | 30%  | 0               | 0.0249 | 0.0498 | 0.0747 | 0.0996 | 0.1245 | 0.249 | 0.498 | 0.747 | 0.996 | 1.245 | 2.49 | 3.735  | 4.98  | 7.47  | 9.96  | 12.45 | 14.94 | 17.43 | 19.92 | 22.41 | 24.9 |
|                        | 40%  | 0               | 0.0332 | 0.0664 | 0.0996 | 0.1328 | 0.166  | 0.332 | 0.664 | 0.996 | 1.328 | 1.66  | 3.32 | 4.98   | 6.64  | 9.96  | 13.28 | 16.6  | 19.92 | 23.24 | 26.56 | 29.88 | 33.2 |
|                        | 50%  | 0               | 0.0415 | 0.083  | 0.1245 | 0.166  | 0.2075 | 0.415 | 0.83  | 1.245 | 1.66  | 2.075 | 4.15 | 6.225  | 8.3   | 12.45 | 16.6  | 20.75 | 24.9  | 29.05 | 33.2  | 37.35 | 41.5 |
|                        | 60%  | 0               | 0.0498 | 0.0996 | 0.1494 | 0.1992 | 0.249  | 0.498 | 0.996 | 1.494 | 1.992 | 2.49  | 4.98 | 7.47   | 9.96  | 14.94 | 19.92 | 24.9  | 29.88 | 34.86 | 39.84 | 44.82 | 49.8 |
|                        | 70%  | 0               | 0.0581 | 0.1162 | 0.1743 | 0.2324 | 0.2905 | 0.581 | 1.162 | 1.743 | 2.324 | 2.905 | 5.81 | 8.715  | 11.62 | 17.43 | 23.24 | 29.05 | 34.86 | 40.67 | 46.48 | 52.29 | 58.1 |
|                        | 80%  | 0               | 0.0664 | 0.1328 | 0.1992 | 0.2656 | 0.332  | 0.664 | 1.328 | 1.992 | 2.656 | 3.32  | 6.64 | 9.96   | 13.28 | 19.92 | 26.56 | 33.2  | 39.84 | 46.48 | 53.12 | 59.76 | 66.4 |
|                        | 90%  | 0               | 0.0747 | 0.1494 | 0.2241 | 0.2988 | 0.3735 | 0.747 | 1.494 | 2.241 | 2.988 | 3.735 | 7.47 | 11.205 | 14.94 | 22.41 | 29.88 | 37.35 | 44.82 | 52.29 | 59.76 | 67.23 | 74.7 |
|                        | 100% | 0               | 0.083  | 0.166  | 0.249  | 0.332  | 0.415  | 0.83  | 1.66  | 2.49  | 3.32  | 4.15  | 8.3  | 12.45  | 16.6  | 24.9  | 33.2  | 41.5  | 49.8  | 58.1  | 66.4  | 74.7  | 83   |

| Common guillemot   |    | Mortality level |        |        |        |        |       |       |       |       |       |      |        |       |       |       |       |       |       |       |       |      |      |  |
|--------------------|----|-----------------|--------|--------|--------|--------|-------|-------|-------|-------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--|
| Displacement level |    | 0%              | 0.10%  | 0.20%  | 0.30%  | 0.40%  | 0.50% | 1%    | 2%    | 3%    | 4%    | 5%   | 10%    | 15%   | 20%   | 30%   | 40%   | 50%   | 60%   | 70%   | 80%   | 90%  | 100% |  |
|                    | 0% | 0               | 0      | 0      | 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    |  |
| 10%                | 0  | 0.0087          | 0.0174 | 0.0261 | 0.0348 | 0.0435 | 0.087 | 0.174 | 0.261 | 0.348 | 0.435 | 0.87 | 1.305  | 1.74  | 2.61  | 3.48  | 4.35  | 5.22  | 6.09  | 6.96  | 7.83  | 8.7  |      |  |
| 20%                | 0  | 0.0174          | 0.0348 | 0.0522 | 0.0696 | 0.087  | 0.174 | 0.348 | 0.522 | 0.696 | 0.87  | 1.74 | 2.61   | 3.48  | 5.22  | 6.96  | 8.7   | 10.44 | 12.18 | 13.92 | 15.66 | 17.4 |      |  |
| 30%                | 0  | 0.0261          | 0.0522 | 0.0783 | 0.1044 | 0.1305 | 0.261 | 0.522 | 0.783 | 1.044 | 1.305 | 2.61 | 3.915  | 5.22  | 7.83  | 10.44 | 13.05 | 15.66 | 18.27 | 20.88 | 23.49 | 26.1 |      |  |
| 40%                | 0  | 0.0348          | 0.0696 | 0.1044 | 0.1392 | 0.174  | 0.348 | 0.696 | 1.044 | 1.392 | 1.74  | 3.48 | 5.22   | 6.96  | 10.44 | 13.92 | 17.4  | 20.88 | 24.36 | 27.84 | 31.32 | 34.8 |      |  |
| 50%                | 0  | 0.0435          | 0.087  | 0.1305 | 0.174  | 0.2175 | 0.435 | 0.87  | 1.305 | 1.74  | 2.175 | 4.35 | 6.525  | 8.7   | 13.05 | 17.4  | 21.75 | 26.1  | 30.45 | 34.8  | 39.15 | 43.5 |      |  |
| 60%                | 0  | 0.0522          | 0.1044 | 0.1566 | 0.2088 | 0.261  | 0.522 | 1.044 | 1.566 | 2.088 | 2.61  | 5.22 | 7.83   | 10.44 | 15.66 | 20.88 | 26.1  | 31.32 | 36.54 | 41.76 | 46.98 | 52.2 |      |  |
| 70%                | 0  | 0.0609          | 0.1218 | 0.1827 | 0.2436 | 0.3045 | 0.609 | 1.218 | 1.827 | 2.436 | 3.045 | 6.09 | 9.135  | 12.18 | 18.27 | 24.36 | 30.45 | 36.54 | 42.63 | 48.72 | 54.81 | 60.9 |      |  |
| 80%                | 0  | 0.0696          | 0.1392 | 0.2088 | 0.2784 | 0.348  | 0.696 | 1.392 | 2.088 | 2.784 | 3.48  | 6.96 | 10.44  | 13.92 | 20.88 | 27.84 | 34.8  | 41.76 | 48.72 | 55.68 | 62.64 | 69.6 |      |  |
| 90%                | 0  | 0.0783          | 0.1566 | 0.2349 | 0.3132 | 0.3915 | 0.783 | 1.566 | 2.349 | 3.132 | 3.915 | 7.83 | 11.745 | 15.66 | 23.49 | 31.32 | 39.15 | 46.98 | 54.81 | 62.64 | 70.47 | 78.3 |      |  |
| 100%               | 0  | 0.087           | 0.174  | 0.261  | 0.348  | 0.435  | 0.87  | 1.74  | 2.61  | 3.48  | 4.35  | 8.7  | 13.05  | 17.4  | 26.1  | 34.8  | 43.5  | 52.2  | 60.9  | 69.6  | 78.3  | 87   |      |  |