Supplementary Table 1. Aleutian Islands and Bering Sea region number of BIA scores per scoring metric by species and summary statistics of scores. Totals include the hierarchical BIA parent only and do not include the child BIA.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total BIAs** |  | **Importance Score** |  | **Intensity** |  | **Data Support** |
| **Species** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |
| Beluga | 3 |   | 2 | 1 | 0 | 1.33 | 0.47 | 1.0 |   | 2 | 1 | 0 | 1.33 | 0.47 | 1.0 |   | 0 | 2 | 1 | 2.33 | 0.47 | 2.0 |
| Bowhead | 4 |   | 1 | 1 | 2 | 2.25 | 0.83 | 2.5 |   | 1 | 0 | 3 | 2.50 | 0.87 | 3.0 |   | 1 | 3 | 0 | 1.75 | 0.43 | 2.0 |
| Fin whale | 3 |   | 0 | 3 | 0 | 2.00 | 0.00 | 2.0 |   | 0 | 1 | 2 | 2.67 | 0.47 | 3.0 |   | 2 | 0 | 1 | 1.67 | 0.94 | 1.0 |
| Gray whale | 3 |   | 0 | 3 | 0 | 2.00 | 0.00 | 2.0 |   | 0 | 1 | 2 | 2.67 | 0.47 | 3.0 |   | 2 | 1 | 0 | 1.33 | 0.47 | 1.0 |
| Humpback whale | 2 |   | 1 | 1 | 0 | 1.50 | 0.50 | 1.5 |   | 0 | 2 | 0 | 2.00 | 0.00 | 2.0 |   | 1 | 0 | 1 | 2.00 | 1.00 | 2.0 |
| North Pacific Right Whale | 2 |   | 1 | 0 | 1 | 2.00 | 1.00 | 2.0 |   | 0 | 1 | 1 | 2.50 | 0.50 | 2.5 |   | 1 | 1 | 0 | 1.50 | 0.50 | 1.5 |
| Sperm Whale | 2 |   | 1 | 0 | 1 | 2.00 | 1.00 | 2.0 |   | 1 | 0 | 1 | 2.00 | 1.00 | 2.0 |   | 0 | 2 | 0 | 2.00 | 0.00 | 2.0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Total BIAs** | **Spatio-Temporal Variability** |  | **Boundary Certainty** |
| **Species** | **s** | **d** | **e** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |
| Beluga | 3 | 0 | 3 | 0 |   | 1 | 1 | 1 | 2.00 | 0.82 | 2.0 |
| Bowhead | 4 | 0 | 4 | 0 |   | 1 | 3 | 0 | 1.75 | 0.43 | 2.0 |
| Fin whale | 3 | 0 | 3 | 0 |   | 2 | 1 | 0 | 1.33 | 0.47 | 1.0 |
| Gray whale | 3 | 2 | 1 | 0 |   | 2 | 1 | 0 | 1.33 | 0.47 | 1.0 |
| Humpback whale | 2 | 0 | 2 | 0 |   | 1 | 1 | 0 | 1.50 | 0.50 | 1.5 |
| North Pacific Right Whale | 2 | 1 | 0 | 1 |   | 1 | 1 | 0 | 1.50 | 0.50 | 1.5 |
| Sperm Whale | 2 | 0 | 1 | 1 |   | 1 | 1 | 0 | 1.50 | 0.50 | 1.5 |

Supplementary Table 2. Aleutian Islands and Bering Sea region summary statistics of BIA scores by scoring metric of Importance, Intensity, and Data Support per BIA type. Totals include the hierarchical BIA parent only and do not include the child BIA.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total BIAs** |  | **Importance Score** |  | **Intensity** |  | **Data Support** |
| **BIA Type** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |
| F-BIA | 15 |  | 4 | 7 | 4 | 2.00 | 0.73 | 2.0 |  | 3 | 5 | 7 | 2.27 | 0.77 | 2.0 |  | 4 | 9 | 2 | 1.87 | 0.62 | 2.0 |
| M-BIA | 3 |  | 1 | 2 | 0 | 1.67 | 0.47 | 2.0 |  | 0 | 1 | 2 | 2.67 | 0.47 | 3.0 |  | 3 | 0 | 0 | 1.00 | 0.00 | 1.0 |
| S-BIA | 1 |  | 1 | 0 | 0 | 1.00 | 0.00 | 1.0 |  | 1 | 0 | 0 | 1.00 | 0.00 | 1.0 |  | 0 | 0 | 1 | 3.00 | 0.00 | 3.0 |
| R-BIA | 0 |   | NA | NA | NA | NA | NA | NA |   | NA | NA | NA | NA | NA | NA |   | NA | NA | NA | NA | NA | NA |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Total BIAs** |  | **Spatio-Temporal Variability** |  | **Boundary Certainty** |
| **BIA Type** |  | **s** | **d** | **e** |  | **1** | **2** | **3** | **Mean**  | **STD** | **Median** |
| F-BIA | 15 |   | 1 | 13 | 1 |   | 6 | 9 | 0 | 1.60 | 0.49 | 2.0 |
| M-BIA | 3 |   | 2 | 0 | 1 |   | 3 | 0 | 0 | 1.00 | 0.00 | 1.0 |
| S-BIA | 1 |   | 0 | 1 | 0 |   | 0 | 0 | 1 | 3.00 | 0.00 | 3.0 |
| R-BIA | 0 |   | NA | NA | NA |   | NA | NA | NA | NA | NA | NA |

Supplementary Table 3. Aleutian Island and Bering Sea region watch list areas by species and BIA type, with general locations, scores, and designated months. IS = Importance Score, Int. = Intensity, DS = Data Support, STV = Spatiotemporal Variability, BC = Boundary Certainty, TA = Transboundary Across.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **BIA Label** | **Stock or Population** | **Type** | **Descriptive Name** | **IS** | **Int.** | **DS** | **STV** | **BC** | **Months Active** |  |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **TA** |
| **Beluga** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | R-BIA0-d-b1-ABS048-0 | Eastern Beaufort Sea, Eastern Chukchi Sea, Eastern Bering Sea | R | EBS, ECS, & EB/NS Wintering grounds | 0 | 1 | 1 | d | 1 |  |  |  |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | S-BIA0-d-b1-ABS047-0 | Bristol Bay | S | Bristol Bay - winter | 0 | 1 | 1 | d | 1 | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |
| **Bowhead** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | M-BIA0-?-b1-ABS020-0 | Bering-Chukchi-Beaufort | M | Chukotka Coast | 0 | 1 | 1 | ? | 1 |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | M-BIA0-e-b1-ABS057-0 | Bering-Chukchi-Beaufort | M | St. Matthew Island - Northbound | 0 | 1 | 1 | e | 1 |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ARC |
|  | R-BIA0-e-b1-ABS021-0 | Bering-Chukchi-Beaufort | R | Southeast Bering Sea | 0 | 1 | 1 | e | 1 | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Dall's Porpoise** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS049-0 | Alaska | F | Bering Sea | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |
| **Fin Whale** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS033-0 | Northeast Pacific | F | Bristol Bay | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS035-0 | Northeast Pacific | F | Southcentral Bering Sea | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS037-0 | Northeast Pacific | F | BS1 Mooring | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X |  |  |
|  | M-BIA0-d-b1-ABS034-0 | Northeast Pacific | M | BS4 & BS6 Moorings | 0 | 1 | 1 | d | 1 | X | X | X | X |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X |  |  |
|  | M-BIA0-d-b1-ABS039-0 | Northeast Pacific | M | NM1 Mooring | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X |  |  |  |  |
| **Gray Whale** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-?-b1-ABS024-0 | Eastern North Pacific | F | Alaska Peninsula | 0 | 1 | 1 | ? | 1 |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-?-b1-ABS052-0 | Eastern North Pacific | F | St. Lawrence Island | 0 | 1 | 1 | ? | 1 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |
| **Harbor Porpoise** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS050-0 | Bering Sea | F | Southeast Bering Sea & Bristol Bay | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |
| **Humpback Whale** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS029-0 | Western North Pacific or Central North Pacific | F | M4, BS2, M5 Moorings | 0 | 1 | 1 | d | 1 | X | X |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |  |  |
|  | F-BIA0-d-b1-ABS030-0 | Western North Pacific or Central North Pacific | F | M8 & BS1 Moorings | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X |  |  |
|  | F-BIA0-d-b1-ABS031-0 | Western North Pacific or Central North Pacific | F | NM1 Mooring | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **BIA Label** | **Stock or Population** | **Type** | **Descriptive Name** | **IS** | **Int.** | **DS** | **STV** | **BC** | **Months Active** |  |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **TA** |
| **Minke Whale** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-d-b1-ABS051-0 | Alaska | F | Aleutian Islands/Bering Sea/Chukchi Sea | 0 | 1 | 1 | d | 1 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X |  |  |  |  |  | ARC |
| **North Pacific Right Whale** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-e-b1-ABS042-0 | Eastern North Pacific | F | Northern Bering BS1 Mooring | 0 | 1 | 1 | e | 1 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X |  |  |  |  |
|  | F-BIA0-e-b1-ABS043-0 | Eastern North Pacific | F | BS2 Mooring | 0 | 1 | 1 | e | 1 |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X |  |  |  |  |
| **Sperm Whale** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-?-b1-ABS054-0 | North Pacific | F | Aleutian Islands - winter | 0 | 1 | 1 | ? | 1 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F-BIA0-?-b1-ABS056-0 | North Pacific | F | Aleutian Basin | 0 | 1 | 1 | ? | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X | X |   |   |   |   |   |   |  |  |