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National Marine Fisheries Service
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Office of Naval Research

UNCLASSIFIED

2023 – 2024

Office of Naval Research Arctic Research Activities

Incidental Harassment Authorization

Year 6 After-Action Report

December 11, 2024

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Office of Naval Research Arctic Research Activities – Incidental Harassment Authorization After Action Report for 2023 – 2024

1 INTRODUCTION

The U.S. Navy prepared this After Action Report in compliance with the National Marine Fisheries Service (NMFS) Incidental Harassment Authorization Renewal under the Marine Mammal Protection Act (MMPA) for Office of Naval Research (ONR) Active Research Activities in 2023 - 2024. The IHA renewal was provided to ONR with a date of September 18, 2023 and covered scientific experiments in the Beaufort Sea from date of issuance through September 13, 2024 (88 Federal Register 65657). That time period is discussed in this report. A biological opinion issued by NMFS is covered by this monitoring report as well (AKRO-2022-01871 issued September 23, 2022).

As described in paragraph 6(a) of the 2023 – 2024 IHA, ONR is required to report the following information to NMFS:

(1) Acoustic source use;

(2) Number of shutdowns during monitoring;

(3) Marine mammal sightings (including the marine mammal's location),

(4) The number of individuals of each species observed during source deployment and operation; and,

(5) Marine mammal behavior and distance from the project activities;

This information will be provided in Sections (2)-(4) below. An estimated number of marine mammals taken during the activity was then calculated in Section (5).

One cruise occurred under this IHA aboard Research Vessel (R/V) Sikuliaq. The R/V Sikuliaq cruise departed Nome, Alaska on September 1, 2024 and returned to Nome on September 18, 2024. It is important to note that this cruise spanned across two active IHA periods; this report deals only with activities through September 13, 2024.

2 Sound Sources Used

The modeled and permitted acoustic sources are listed in Table 1-1 of the 2022 – 2023 IHA application. The IHA covered deployment and use of nine active acoustic sources to be left in place for one year, two Ice Gateway Buoys (IGBs) to be left in place for one year, use of seagliders and one autonomous underwater vehicle (REMUS AUV), and icebreaking. All other research objectives were not considered to lead to take of marine mammals, and were not considered further under the MMPA. All nine moorings with active acoustic sources were deployed for the IHA period.

Permitted activities during the R/V Sikuliaq cruise in fall 2024 included:

- Recovered one seaglider deployed in 2023. Launched 3 seagliders.
- Recovered one VLF source moorings.
- Recovered one acoustic navigation mooring.

No icebreaking was required during the research cruise.

3 Individual marine mammal sighting information

3.1 R/V Sikuliaq Cruise (Fall 2024)

There were no marine mammal sightings during the R/V Sikuliaq cruise, both during transit and within the Study Area.

4 Mitigation Shutdown

As there were no marine mammal sightings during research cruise activities, no shutdowns were required.

5 Take Estimate

No dead or injured animals were observed during either research cruise. No take of marine mammal was observed during the IHA period.

The authorized Level B take from the 2023-2024 IHA renewal (and therefore from the 2022-2023 IHA) was:

- Beluga Whale (Beaufort Sea Stock): 145
- Beluga whale (Eastern Chukchi Sea stock): 145
- Ringed Seal: 3,378

The relevant estimate of take comes from:

- Seven ONR Fixed Navigation sources that continued to transmit for the duration of the IHA;
- Two IGB buoys that continued to transmit for the duration of the IHA period;
- Seaglider deployments; and,
- Eight days of icebreaking.

All leave behind acoustic sources were deployed and active for the duration of the IHA period, and all other acoustic sources for which takes were requested were used to the anticipated levels. As no icebreaking occurred, those estimated takes are assumed to not have occurred. The Navy requested 22 Level B takes of beluga whales (11 per stock) and 539 Level B takes of ringed seals associated with icebreaking.

Based on the analysis above, the Navy assumes that the Level B take of marine mammals associated with Arctic Research Activities is equivalent to the number requested for non-icebreaking activities. **Therefore, the total number of animals estimated to have been taken by the Proposed Action is:**

- Beluga whale (Beaufort Sea stock): 134 Level B takes
- Beluga whale (Eastern Chukchi Sea stock): 134 Level B takes
- Ringed seal 2,839 Level B takes

6 Conclusion

As described above, this IHA period consisted of year-round use of leave behind sources. The Navy believes the Level B take numbers may be conservatively high, but due to the barriers to monitoring (i.e., year-round deployment of acoustic sources in remote locations), there is no way to prove lower take numbers than were modeled.