FINDING OF NO SIGNIFICANT IMPACT FOR THE ISSUANCE OF AN INCIDENTAL HARASSMENT AUTHORIZATION TO THE U.S. NAVY TO TAKE MARINE MAMMALS BY HARASSMENT INCIDENTAL TO ARCTIC RESEARCH ACTIVITIES IN THE BEAUFORT AND EASTERN CHUKCHI SEAS 2024-2025

FINDING OF NO SIGNIFICANT IMPACT

I. Purpose of Finding of No Significant Impact (FONSI)¹: The National Environmental Policy Act (NEPA) requires the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) for any proposal for a major federal action significantly affecting the quality of the human environment. 42 U.S.C. § 4332(C). The Council on Environmental Quality (CEQ) Regulations direct agencies to prepare a Finding of No Significant Impact (FONSI) when an action not otherwise excluded will not have a significant effect on the human environment (40 CFR §§ 1500.4(b), 1500.5(b), & 1501.6). To evaluate whether a significant effect on the human environment is likely, the CEQ regulations direct agencies to analyze the potentially affected environment and the intensity of the effects of the proposed action (40 CFR § 1501.3(d)). In doing so, agencies should consider the geographic extent of the affected area (i.e., national, regional or local), the resources located in the affected area (40 CFR § 1501.3(d)(1)), and whether the project is considered minor or small-scale². In considering the intensity of effects on these resources, agencies should examine, as appropriate, short- and long-term effects, beneficial and adverse effects, as well as effects that would violate laws for the protection of the environment, and the magnitude of the effect (e.g., negligible, minor, moderate, major) (NAO 216-6A CM Appendix A-2 - A-3). CEQ identifies specific criteria for consideration at 40 CFR § 1501.3(d)(2)(i)-(viii). Each criterion is discussed below with respect to the proposed action and considered individually as well as in combination with the others.

On March 29, 2024, NMFS received a request from the Office of Naval Research (ONR) for an Incidental Harassment Authorization (IHA) to take marine mammals incidental to ARA in the Beaufort and Chukchi Seas. The ONR's request is for take of beluga whales (*Delphinapterus leucas*) and ringed seals (*Pusa hispida hispida*) by Level B harassment only. Neither the ONR nor

¹ This FONSI applies CEQ's Phase 2 NEPA regulations (effective July 1, 2024). The NEPA process for this action began on August 5, 2024 after the IHA application was deemed adequate and complete.

² Minor and small scale are terms NOAA considers in the agency's NEPA procedures in the context of the particular proposal, including its proposed location. In assessing whether the scope of a proposed action is small, in addition to the actual magnitude of the proposal, NOAA considers factors such as industry norms and the relationship of the proposed action to similar types of development or activity in the vicinity of the proposed action. When considering the size of a proposed facility, for example, NOAA would review the surrounding land uses, the scale of the proposed action relative to existing development, and the capacity of existing roads and other infrastructure to support the proposed action. These terms are meant for interpretation purposes and do not supersede the CEQ Regulations at 40 C.F.R. 1508 (NAO 216-6A CM, Appendix A-2).

NMFS expect serious injury or mortality to result from this activity. Following NMFS' review of the application, the ONR submitted a revised version on July 23, 2024. The application was deemed adequate and complete on August 5, 2024. Therefore the initiation of the NEPA process began on August 5, 2024.

In preparing this FONSI, National Marine Fisheries Service (NMFS) reviewed the U.S. Navy's Overseas Environmental Assessment (OEA), *Office of Naval Research Arctic Research Activities in the Beaufort and Chukchi Seas 2022-2025* (September 13, 2022), which evaluates the affected area, the scale and geographic extent of the proposed action, and the degree of effects on those resources (including the potential duration of effects, whether the effects may be adverse and/or beneficial, and the potential magnitude of effects). The OEA is hereby incorporated by reference in accordance with 40 CFR § 1501.6(c).

II. Approach to Analysis:

NMFS proposes to issue an IHA to the ONR pursuant to Section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972 (MMPA), as amended (16 U.S.C. 1361 et seq.) and Title 50 of the Code of Federal Regulations (CFR) Part 216. This IHA would be valid for one year from the date of issuance and authorize the potential take, by Level B harassment, of marine mammals incidental to Arctic Research Activities (ARA) in the Beaufort and eastern Chukchi Seas. No take of marine mammals by injury (considered Level A harassment under the MMPA), serious injury, or mortality is anticipated by the ARA action proposed in the ONR OEA, or proposed to be authorized in the NMFS IHA. The ARA would involve acoustic testing and a multi-frequency navigation system concept test employing acoustic sources to gain a better understanding of climate change in the Arctic environment. Active acoustic sources transmitting at very-low (35 hertz (Hz)), low (900 Hz), and mid (10 kilohertz (kHz)) frequencies would be deployed as moored, ice-tethered, or drifting from the research vessel. Acoustic sources and receivers would provide a means of performing under-ice navigation for gliders and unmanned underwater vehicles (UUVs). Up to six moorings (four fixed acoustic navigation sources, two very-low-frequency sources) would remain in place for a year, within the IHA period. Drifting and moored oceanographic sensors would record environmental parameters throughout the year. Underwater sound from the acoustic sources may result in Level B harassment of two species (comprising three stocks) of marine mammals in the form of startling or avoidance reactions, increased swimming speed, increased surfacing time, or decreased foraging. Any potential ice breaking activities associated with the surveys may cause behavioral disturbance or temporary threshold shifts (TTS). Therefore, ONR requires an authorization from NMFS for incidental take pursuant to the MMPA. An authorization for incidental take shall be granted if NMFS finds that the take will have a negligible impact on the species or stocks, and, where relevant, will not have an unmitigable adverse impact on the availability of the species or stocks for subsistence uses. In addition, the IHA must set forth the permissible methods of taking, other means of effecting the least practicable adverse impact on the species or stock and its habitat, and requirements pertaining to the monitoring and reporting of such takings.

NMFS' proposed action, the issuance of an IHA to ONR, is a direct outcome of ONR's request for an IHA to authorize take of marine mammals incidental to ONR's ARA. ONR's action may cause effects to the resources in the affected area; however, there is no potential for the effects of NMFS' action to add to the effects of ONR's action or other projects, such that the effects analyzed together could be significant.

NMFS' proposed action is not considered to meaningfully contribute to a significant adverse effect based on scale of effect (authorization of take of beluga whales and ringed seals, by Level B harassment only) as the action is temporary (*i.e.*, will be in place for 1 year) and the activities have very little economic and environmental effect. No take of marine mammals by injury (Level A harassment), serious injury, or mortality is anticipated or proposed to be authorized in the IHA.

NMFS' proposed action will not meaningfully contribute to significant adverse effects to specific resources, given the limited scope of NMFS' action and required mitigation measures, as described in the 2022 OEA and this FONSI. NMFS has determined the proposed activity would have a negligible impact on all affected marine mammal species and stocks, and their habitat.

The NMFS proposed action is not connected to other planned or ongoing actions that have caused or may cause effects to the resources in the affected area; and there is no potential for the effects of the proposed action to add to the effects of other projects, such that the effects taken together could be significant.

III. Geographic Extent and Scale of the Proposed Action:

The proposed action would occur within the ARA Study Area, which includes the U.S. Exclusive Economic Zone (EEZ), the global commons, and the Canadian EEZ (Figure 1-1 of the 2022 OEA). The proposed action would primarily occur in the Beaufort Sea; but the analysis considers the potential for active sound sources on drifting buoys to travel into the eastern portion of the Chukchi Sea. The closest point of the Study Area to the Alaska coast is 110 nautical miles (nm; 204 kilometers (km)). The environmental effects analyzed in the 2022 OEA occur at a small localized scale. As described in the 2022 OEA, ONR concluded the ARA would occur far enough offshore to minimize any effects to subsistence hunts. The distance from shore and time of year for the proposed action would eliminate the potential for interactions with other species of marine mammals besides beluga whale and ringed seal.

IV. Degree of Effect:

A. The potential for the proposed action to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection.

The issuance of this IHA to ONR would not violate any federal, state, or local laws for environmental protection. NMFS' compliance with environmental laws and regulations is based on NMFS' action and the nature of the applicant's activities. NMFS complied with the requirements of the MMPA to develop this FONSI and associated IHA. NMFS Office of Protected Resources (OPR) previously consulted with the NMFS Alaska Regional Office (AKR) under Section 7 of the Endangered Species Act (ESA) to determine if the issuance of an IHA for ONR's ARA would likely jeopardize the continued existence of listed species or result in the destruction or adverse modification of ESA designated critical habitat. AKR issued a Biological Opinion (September 13, 2022) concluding that issuance of an IHA would not jeopardize any listed species or destroy or adversely modify critical habitat, described further in Section C, below. The 2022 Biological Opinion is based on a Biological Evaluation that covers ONR's ARA from 2022-2025. Therefore, NMFS has determined that issuance of this IHA is covered by the 2022 Biological Opinion and that further consultation is unnecessary. ONR fulfilled its responsibilities under the MMPA and ESA for this action,

and would be required to obtain any additional federal, state, and local permits necessary to carry out the proposed ARA.

B. The degree to which the proposed action is expected to affect public health or safety.

The issuance of this IHA to ONR to authorize take of marine mammals is not likely to affect public health or safety because the proposed ARA will take place across a broad area of a relatively remote, offshore marine environment and is unlikely to overlap with activities conducted by the public or subsistence hunters. NMFS only authorizes the take of marine mammal species associated with these activities, which does not involve the public or expose the public directly (*e.g.*, chemicals, diseases) or indirectly (*e.g.*, food sources) to hazardous or toxic materials in a way that would be linked to the quality of the environment and well-being of humans.

- C. The degree to which the proposed actions is expected to affect a sensitive biological resource, including:
 - a. Federal threatened or endangered species and critical habitat; NMFS' proposed action of issuing an IHA to ONR would not violate any federal, state, or local laws for environmental protection. NMFS' compliance with environmental laws and regulations is based on NMFS' action and the nature of the applicant's activities. The issuance of the IHA to the ONR would authorize incidental take in the form of short-term and localized changes in behavior and/or temporary displacement and TTS of Arctic ringed seals, which are listed as threatened under the ESA. AKR issued a Biological Opinion (September 13, 2022) concluding that the issuance of an IHA to ONR for ARA is not likely to jeopardize the continued existence of Arctic ringed seals. The 2022 Biological Opinion is based on a Biological Evaluation that covers ONR's ARA from 2022-2025. Therefore, NMFS has determined that issuance of this IHA is covered by the 2022 Biological Opinion and that further consultation is unnecessary.

NMFS expects that the responses of ringed seals from the ARA would primarily be in the form of temporary displacement from the area and/or short-term behavioral changes, with limited potential for TTS, falling within the MMPA definition of "Level B harassment." NMFS does not anticipate that take by injury (Level A harassment), serious injury, or mortality would occur, nor has NMFS proposed to authorize take by injury, serious injury, or mortality. Further, as described in Section 5.2 of the 2022 OEA (Mitigation Measures), ONR would implement mitigation measures to reduce or avoid potential harm to marine resources, including marine mammals.

NMFS has designated critical habitat for the Arctic subspecies of the ringed seal (87 FR 19232, April 1, 2022). The Study Area does not overlap with ringed seal designated critical habitat; however, as stated in NMFS' final rule for the Designation of Critical Habitat for the Arctic Subspecies of the Ringed Seal (87 FR 19232, April 1, 2022), the area excluded from the critical habitat contains one or more of the essential features of the Arctic ringed seal's critical habitat, therefore, even though this area is excluded from critical habitat designation, habitat with the physical and biological features essential for ringed seal conservation is still available to the

species, although data are limited to inform NMFS' assessment of the relative value of this area to the conservation of the species. NMFS does not anticipate significant adverse effects to any marine mammal habitat, including ringed seal critical habitat, as a result of the ONR's ARA due to the short duration of activities and additional similar habitat available nearby.

b. stocks of marine mammals as defined in the Marine Mammal Protection Act; As stated above, NMFS' proposed action of issuing an IHA to ONR would authorize incidental take, by Level B harassment, in the form of short-term and localized changes in behavior and/or temporary displacement of two stocks (Beaufort Sea, Eastern Chukchi Sea) of beluga whales and one stock of ringed seals (Arctic), in addition to potential TTS of Arctic ringed seals. NMFS has proposed issuing an IHA to authorize this incidental take, by Level B harassment, of beluga whales and Arctic ringed seals. Take by injury (Level A harassment), serious injury, or mortality is not anticipated nor proposed to be authorized.

In addition to considering estimates of the number of marine mammals that are reasonably likely to be "taken" by harassment, NMFS considered other factors, such as the likely nature of any responses (e.g., intensity, duration), the context of any responses (e.g., critical reproductive time or location, migration), as well as effects on habitat, and the likely effectiveness of the mitigation. NMFS also assessed the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with the 1989 preamble for NMFS' implementing regulations (54 FR 40338; September 29, 1989), the effects from other past and ongoing anthropogenic activities are incorporated into this analysis via their effects on the environmental baseline (e.g., as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

ONR calculated the number of estimated takes of beluga whale, by Level B harassment, from active acoustic sources using the Navy Acoustic Effects Model (NAEMO) and behavioral dose response function, which was also used to estimate take of beluga whale and ringed seal from potential icebreaking noise. To estimate takes of ringed seal, by Level B harassment, due to acoustic sources, ONR used historical sightings data from previous ARA cruises and the Ocean Biodiversity Information System Spatial Ecological Analysis of Megavertebrate Populations (OBIS-SEAMAP database) to estimate density, which was used to estimate take of ringed seals due to acoustic sources. The number of anticipated takes are low relative to the estimated abundances of the affected stocks.

The Study Area also overlaps with beluga whale migratory and feeding biologically important areas (BIAs). Due to the small amount of overlap between the BIAs and the ARA Study Area as well as the low intensity and short-term duration of acoustic sources and required mitigation measures, minimal impacts to migrating or feeding belugas are expected. Additionally, the ONR's proposed action is temporary and of relatively short duration. Potential adverse effects on prey species would also be temporary and spatially limited. Furthermore, alternate areas of similar habitat value

for affected marine mammals would be available allowing animals to temporarily vacate the affected areas to avoid exposure to sound.

For these reasons, effects resulting from this activity are not expected to significantly affect the marine mammal species or stocks as defined in the MMPA. Accordingly, NMFS preliminarily determined that the specified activity would have a negligible impact on the affected species and stocks of marine mammals.

The mitigation measures which ONR plans to implement, and which would be required by the IHA to ensure the least practicable adverse impact on affected marine mammals and their habitat, are described in Section 5.2 (Mitigation Measures) of the 2022 OEA.

- c. essential fish habitat identified under the Magnuson–Stevens Fishery Conservation and Management Act;
 - NMFS' proposed action of issuing an IHA to the ONR to incidentally take marine mammals, by Level B harassment only, would not cause substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH). NMFS' action is constrained to the issuance of authorization to take small numbers of marine mammals incidental to ONR's activities. NMFS is not permitting or authorizing directly any of ONR's ARA activities. Thus the issuance of the IHA would not affect designated EFH.
- d. bird species protected under the Migratory Bird Treaty Act; NMFS' proposed action of issuing an IHA to the ONR to incidentally take marine mammals, by Level B harassment only, in the form of short-term and localized changes in behavior and/or temporary displacement of beluga whales and Arctic ringed seals as well as TTS of Arctic ringed seals, would not result in a significant adverse effect on a population of migratory bird species. The effects of NMFS' proposed action on marine mammals would be temporary and localized in nature and would not result in substantial adverse effects to marine mammals or to their role in the ecosystem, including in relation to birds.
- e. national marine sanctuaries or monuments; NMFS' proposed action of issuing an IHA to ONR incidentally take marine mammals would not affect a national marine sanctuary or monument, as ONR's proposed activity does not take place within or near either. Therefore, take authorized under the IHA, if issued, would also not occur within or near a national marine sanctuary or monument.
- f. vulnerable marine or coastal ecosystems, including, but not limited to, shallow or deep coral ecosystems;
 - NMFS' proposed action of issuing an IHA to ONR to incidentally take beluga whales and ringed seals would not cause substantial damage to marine or coastal ecosystems, as the action would be limited to the authorization of take by Level B harassment of these species incidental to noise generated by active acoustic sources and ice breaking. IHAs do not authorize the underlying activity (in this case, the ONR's ARA), only the potential take incidental to that activity. The incidental take

of beluga whales and ringed seals, by Level B harassment that would be authorized under this IHA, if issued, would not have any effect on vulnerable marine or coastal ecosystems.

- g. biodiversity or ecosystem functioning (e.g., benthic productivity, predator-prey relationships, etc.)
 NMFS' proposed action of issuing an IHA to ONR to incidentally take marine mammals would not have a substantial adverse effect on biodiversity and/or ecosystem function within the ARA Study Area. NMFS expects that the ONR's proposed action may result in take by Level B harassment, in the form of short-term and localized changes in behavior and/or temporary displacement of beluga whales and Arctic ringed seals, and TTS of Arctic ringed seals, and has proposed issuing an IHA to authorize this take. Any effects would be temporary and localized in nature and would not result in substantial adverse effects to beluga whales or ringed seals or to their roles in the ecosystem. Take by injury (Level A harassment), serious injury, or mortality is not anticipated nor proposed to be authorized.
- D. The degree to which the proposed action is reasonably expected to affect a cultural resource: properties listed or eligible for listing on the National Register of Historic Places; archeological resources (including underwater resources); and resources important to traditional cultural and religious tribal practice.

NMFS' proposed action of issuing an IHA to ONR to incidentally take marine mammals would have no foreseeable effect on unique areas, such as historic or cultural resources, parkland, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas. NMFS expects that ONR's proposed action may result in take by Level B harassment, in the form of short-term and localized changes in behavior and/or temporary displacement of beluga whales and ringed seals, and TTS of Arctic ringed seals, and has proposed issuing an IHA to authorize this take. Such harassment is not expected to substantially effect ecologically critical areas or cultural resources, as the effects would be to marine mammals themselves as well as being temporary and localized in nature. Take by injury (Level A harassment), serious injury, or mortality is not anticipated nor proposed to be authorized.

NMFS' proposed action of issuing an IHA to ONR to incidentally take marine mammals is not reasonably likely to cause effects to resources important to traditional culture and religious tribal practice, given the short-term, temporary nature of the activity, the negligible impact of the take on affected marine mammals, and the distance offshore where take would be expected to occur. Although belugas and seals are harvested for subsistence uses off the North Slope of Alaska, ONR's proposed action (and therefore, the take of ringed seals that would be authorized through the IHA), would occur far outside of the range for subsistence hunting with the closest active acoustic source being located approximately 110 nmi (204 km) from land and 70 nmi (130 km) at the closest point to any subsistence hunting. Further, take of marine mammals by injury (Level A harassment), serious injury, or mortality is not anticipated nor proposed to be authorized in the IHA. As stated in Section 3 of the 2022 OEA, no known archaeological, cultural, or historical resources are located within the ARA Study Area.

- E. The degree to which the proposed action has the potential to have a disproportionately high and adverse effect on the health or the environment of minority or low-income communities, compared to the impacts on other communities (E.O. 12898).
 - NMFS' proposed action of issuing an IHA to ONR to incidentally take marine mammals would have no foreseeable effect to minority or low-income communities, let alone a disproportionately high effect to those communities in comparison to the effects on other communities. While the ONR's activities would occur in the Arctic Ocean, and Alaska Natives subsistence hunt beluga whales and ringed seals in the Arctic Ocean, ONR's proposed action (and therefore, the potential take of marine mammals that would be authorized through the IHA) would occur outside of the primary subsistence hunting areas. Though beluga whales and ringed seals are harvested for subsistence uses off the North Slope of Alaska, the ARA Study Area boundary is seaward of subsistence hunting areas (approximately 70 nmi (130 km) from shore at the closest point, though the closest active acoustic sources would be located farther offshore at 110 nmi (204 km) from land).
- F. The degree to which the proposed action is likely to result in effects that contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of the species.
 - NMFS' proposed action of issuing an IHA to the ONR to incidentally take marine mammals would not result in effects that contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of the species. The IHA would be limited to the take of beluga whales and ringed seals incidental to the ONR's proposed active acoustic testing. IHAs do not authorize the underlying activity (in this case, the ONR's ARA), only the take incidental to that activity. The incidental take of beluga whales and ringed seals, by Level B harassment only, that would be authorized under this IHA would not contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of the species.
- G. The potential for the proposed action to cause an effect to any other physical or biological resources where the impact is considered substantial in magnitude (e.g., irreversible loss of coastal resource such as marshland or seagrass) or over which there is substantial uncertainty or scientific disagreement.
 - NMFS' proposed action of issuing an IHA to ONR to incidentally take marine mammals is not expected to cause an effect to any other physical or biological resources where the effect is considered substantial in magnitude (e.g., irreversible loss of coastal resource such as marshland or seagrass) or over which there is substantial uncertainty or scientific disagreement. NMFS' proposed IHA would authorize incidental take by Level B harassment of two stocks of beluga whales and Arctic ringed seals. The take that is expected to occur and proposed for authorization is based on the best available science. This incidental take is expected to be in the form of short-term and localized changes in behavior and/or temporary displacement, and TTS, based on numerous scientific studies, modeling informed by scientific studies, and monitoring conducted as a requirement under previous IHAs for other

projects. Any effects would be temporary and local in nature and are not expected to cause any effect to any other physical or biological resources. Take by injury (Level A harassment), serious injury, or mortality is not anticipated nor proposed to be authorized.

There is scientific uncertainty regarding the abundance of the Alaska stock of ringed seals, for which take by Level B harassment would be authorized through the IHA, if issued. However, this uncertainty does not affect NMFS' ability to determine that effects of NMFS' action would not be significant, given the nature of the ONR's ARA actions for which take would be authorized, as well as the proposed mitigation measures, as described in Section 5.2 of the 2022 OEA.

V. Other Actions Including Connected Actions:

As described in Section 1.3 (Purpose and Need) of the 2022 OEA, NMFS' proposed action and the purpose and need for that action, are a direct outcome of the ONR's request for an MMPA IHA in connection with conducting active acoustic testing activities, including the use of very-low-frequency, low-frequency, and mid-frequency acoustic transmissions throughout the ARA Study Area. If the proposed IHA is issued, that would be the seventh time NMFS has authorized take of marine mammals associated with ONR's activities, following authorizations for activities in 2018, 2019, 2020, 2021, 2022, and 2023 (83 FR 48799, September 27, 2018; 84 FR 50007, September 24, 2019; 85 FR 53333, August 28, 2020; 86 FR 54931, October 5, 2021; 87 FR 57458, September 20, 2022; 88 FR 65657, September 18, 2023).

VI. Mitigation and Monitoring:

NMFS does not authorize the ONR's ARA, however, NMFS does propose to authorize the incidental take of marine mammals under its jurisdiction in connection with these activities and prescribes, where applicable, the methods of taking and other means of effecting the least practicable impact on the species and stocks and their habitats. NMFS' issuance of this IHA would thus be conditioned upon reporting requirements and the implementation of mitigation and monitoring designed to reduce effects to marine mammals to the level of least practicable impact, as required under Section 101(a)(5)(D) of the MMPA. These conditions are summarized below and are described in detail in Chapter 5 of the 2022 OEA as well as the proposed IHA.

Vessels operated by or for the U.S. Navy, including those associated with the Proposed Action, would have personnel assigned to stand watch at all times, day and night, when moving through the water or using active acoustic sources. All watch personnel complete U.S. Navy Marine Species Awareness Training (MSAT). Personnel on watch will employ visual search techniques, including the use of binoculars and an MSAT scanning method.

Measures to avoid take during ARA include:

- All vessels operated by or for the ONR must have personnel assigned to stand watch at all times while underway.
- During moored and drifting acoustic source deployment, ONR must implement a mitigation zone of 55 meters (180 feet) around the deployed source. Deployment must cease if a marine mammal is visually detected within the mitigation zone.

- Vessels must avoid approaching marine mammals head-on and must maneuver to maintain a mitigation zone of 457 meters (500 yards) around all observed cetaceans and 183 meters (200 yards) around all other observed marine mammals, provided it is safe to do so.
- Vessel captains will maintain at-sea communication with subsistence hunters to avoid conflict of vessel transit with hunting activity.
- Activities must cease if a marine mammal species for which take was not authorized, or a species for which authorization was granted but the authorized number of takes have been met, is observed approaching or within the Level A or Level B harassment zones. Activities must not resume until the animal is confirmed to have left the area.
- While underway, all vessels must have at least one person trained through the U.S. Navy Marine Species Awareness Training Program on watch during all activities.
- Watch personnel must use standardized data collection forms, whether hard copy or electronic. Watch personnel must distinguish between sightings that occur on transit or during deployment of acoustic sources. Data must be recorded on all days of activities even if marine mammals are not sighted.
- During deployment of acoustic sources or unmanned underwater vehicles (UUVs), visual observation must begin 30 minutes prior to deployment and continue through 30 minutes following the source deployment.

DETERMINATION

The CEQ NEPA regulations, 40 CFR § 1501.6, direct an agency to prepare a FONSI when the agency, based on the EA for the proposed action, determines not to prepare an EIS because the action will not have significant effects. In view of the information presented in this document and the analysis contained in the supporting OEA prepared for ARA in the Beaufort and Chukchi Seas 2022-2025, it is hereby determined that the ONR ARA will not significantly impact the quality of the human environment. The *Office of Naval Research Arctic Research Activities in the Beaufort and Chukchi Seas 2022-2025* is hereby incorporated by reference. In addition, all potential beneficial and adverse effects of the proposed action, as well as mitigation measures, have been evaluated to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

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Kimberly Damon-Randall		Date
Director, Office of Protected Resources		
National Marine Fisheries Service		

MEMORANDUM FOR: The Record

FROM: Kimberly Damon-Randall

Director, Office of Protected Resources National Marine Fisheries Service

SUBJECT: Adoption of U.S. Navy's Overseas Environmental Assessment on

Office of Naval Research Arctic Research Activities in the Beaufort

and Chukchi Seas 2022-2025

Background

This memorandum documents the National Marine Fisheries Service's (NMFS's) decision to adopt the U.S. Navy's Office of Naval Research (ONR)'s Overseas Environmental Assessment (OEA) for NMFS's proposed issuance of an Incidental Harassment Authorization (IHA) under the Marine Mammal Protection Act (MMPA) to ONR. On March 29, 2024, ONR submitted an application for the authorization of take of a small number of marine mammals incidental to their Arctic Research Activities (ARA). ONR submitted a revised application on July 23, 2024. NMFS determined that the application was adequate and complete on August 5, 2024, and initiated its review under the National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) regulations, 40 C.F.R. §§ 1500 - 15081¹.

NMFS' proposed action is the issuance of an IHA to the U.S. Navy's Office of Naval Research (ONR) in response to their request for authorization of take of marine mammals incidental to Arctic Research Activities (ARA) in the Beaufort and eastern Chukchi Seas, beginning in September 2024. NMFS is required to review applications and if appropriate, issue Incidental Take Authorizations (ITAs) pursuant to Section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972 (MMPA), as amended (16 U.S.C. 1361 et seq.) and Title 50 of the Code of Federal Regulations (CFR) Part 216. The U.S. Navy's ONR has prepared all environmental documentation for the surveys in the ARA Study Area, including the Overseas Environmental Assessment (OEA; Office of Naval Research Arctic Research Activities in the Beaufort and Chukchi Seas 2022-2025, September 13, 2022), that NMFS is adopting.

NMFS' proposed action to issue an IHA to the U.S. Navy constitutes a major federal action triggering independent NEPA compliance obligations for NMFS. NMFS may satisfy its independent NEPA compliance obligation by preparing a separate analysis or, if appropriate, by adopting a NEPA analysis prepared by another agency. NEPA contemplates that to the extent practicable, agencies evaluate a proposed action in a single environmental document. 42 U.S.C. § 4336a(b). After an independent review of the OEA prepared by the U.S. Navy, with specific attention given to its evaluation of effects to marine mammals and their habitat, NMFS is hereby adopting the OEA to satisfy NMFS' independent NEPA obligations related to its decision under the MMPA of whether or not to issue an IHA to the U.S. Navy. This memorandum, consistent

¹ NMFS is applying CEQ's Phase 2 NEPA regulations (effective July 1, 2024) to guide its adoption determination and supporting rationale.

with the CEQ regulations and NOAA's policies and procedures,² documents that determination and provides the underlying rationale and explanation for its adoption decision.

ONR's proposed action constitutes the development of a modified system under the ONR Arctic Mobile Observing System (AMOS) involving very-low-, low-, and mid-frequency (VLF, LF, MF) transmissions (35 Hz, 900 Hz, and 10 kHz, respectively). The AMOS project utilizes acoustic sources and receivers to provide a means of performing under-ice navigation for gliders and unmanned undersea vehicles (UUVs). This would allow for the possibility of year-round scientific observations of the environment in the Arctic. Project activities would include deployment and testing of equipment during one cruise beginning September 2024, active acoustic transmissions from leave-behind sources for the remainder of the proposed IHA, with the potential for a second research cruise in the summer/fall of 2025. The proposed project constitutes the seventh year of ONR's ARA and would occur primarily in the Beaufort Sea, encompassing the U.S. Exclusive Economic Zone (EEZ), the global commons, and the Canadian EEZ. Acoustic sources may drift into the eastern Chukchi Sea. Although not currently planned for the September 2024 cruise, icebreaking may occur on a subsequent cruise within the IHA period (September 2024 to September 2025) if ONR needs to return to the study area to complete scientific objectives or to retrieve acoustic devices.

NMFS has reviewed the ONR's OEA for this action and determined that it is adequate for adoption. The OEA is appropriate for NMFS to adopt because NMFS' proposed action is to issue an IHA authorizing take of marine mammals is a direct outcome incidental to the ONR's ARA action described in the OEA. The ONR's OEA adequately analyzes all environmental impacts of NMFS' proposed action to issue the IHA. Among all other impacts analyzed by the OEA, NMFS looked in particular at acoustic disturbances of marine mammals and impacts of the activities on marine mammal habitat (including prey of marine mammals). The potential adverse effects of ONR's proposed action are not expected to be significant.

Alternatives and Impact Assessment

As part of the OEA, the ONR considered a No Action alternative and two Action alternatives.

Action Alternative 1

Under Action Alternative 1, ONR would conduct all scientific research described in the Proposed Action, with the exception of the use of the VLF sources. Under this alternative, all core scientific objectives are met, including the use of acoustic sources as navigation aids to unmanned vehicles. This alternative would also include NMFS' issuance of an IHA authorizing take by harassment of marine mammals incidental to the non-impulsive acoustic sources. Take of marine mammals would be in the form of temporary threshold shift (TTS) and behavioral disturbance (Level B harassment only; *e.g.*, startling or avoidance reactions, increased swimming speed, increased surfacing time, decreased foraging).

and Procedures for Implementing the National Environmental Policy Act and Related Authorities" issued January 13, 2017.

² See NOAA Administrative Order (NAO) 216-6A "Compliance with the National Environmental Policy Act, Executive Orders 12114, Environmental Effects Abroad of Major Federal Actions; 11988 and 13690, Floodplain Management; and 11990, Protection of Wetlands" issued April 22, 2016 and the Companion Manual (CM) for NAO 216-6A "Policy"

Action Alternative 2 (ONR Preferred)

Under Action Alternative 2, ONR would conduct all scientific research described in the Proposed Action, including the use of the VLF sources. Year-round use of the VLF sources would allow for the navigation system to operate over a larger area. All acoustic sources would typically be recovered and reactivated on a yearly basis. This alternative would also include NMFS' issuance of an IHA authorizing take by harassment of marine mammals incidental to the non-impulsive acoustic sources. Take of marine mammals would be in the form of behavioral disturbance and TTS (Level B harassment only; *e.g.*, startling or avoidance reactions, increased swimming speed, increased surfacing time, decreased foraging). Alternative 2 is the preferred alternative and is what is described in the ONR Request for Incidental Harassment Authorization of Marine Mammals Resulting from ONR Arctic Research Activities 2024-2025.

No Action Alternative

Under the No Action Alternative, ONR's ARA would not occur. All of the potential impacts of the proposed activities would be eliminated. From NMFS' perspective, pursuant to its obligation to grant or deny permit applications under the MMPA, the No Action Alternative would entail NMFS denying the application for an IHA. If NMFS were to deny the application, ONR would not be authorized to incidentally take marine mammals, resulting in no disturbance to marine mammals attributable to the Proposed Action. Acoustic sources that were deployed under the current supplemental OEA and associated regulatory documents would not be recovered, and would cease to transmit at the end of the current IHA period (September 2024).

Environmental Consequences

Under the Proposed Action, localized impacts may range from negligible to minor, while regional impacts would likely be negligible. Analyses of water and sediment quality, as well as biological communities (including plankton, benthic communities, marine mammals, sea turtles, seabirds, and commercial and recreational fisheries) were conducted. No significant impacts were identified. There is potential for take of marine mammals incidental to the proposed acoustic stressors (non-impulsive acoustic sources and icebreaking noise that may occur in the impulsive or non-impulsive sound type) in the form of behavioral disturbance and TTS. Behavioral disturbance and TTS are both considered Level B harassment under the MMPA. Mitigation measures would be used to reduce the potential for adverse impacts. These measures include: visual monitoring of mitigation zones by trained observers; vessel strike avoidance measures; pre-start clearance procedures designed to ensure that animals are not within a defined zone before initiating the acoustic source; and implementation of sound source shutdowns if animals approach the defined mitigation zone in order to minimize potential for auditory injury and more severe behavioral reactions that might occur at close proximity to the source. No mortality or serious injury (considered as Level A harassment under the MMPA) of marine mammals is anticipated or proposed to be authorized. Under the No Action alternative, there would not be any changes to baseline conditions or reasonably-foreseeable trends.

NMFS Review

NMFS has reviewed the ONR's OEA and concludes that the impacts evaluated by ONR are substantially the same as the impacts of NMFS's proposed action to issue an IHA to ONR. In addition, NMFS has evaluated the ONR's OEA and found that it includes all required components for adoption by NMFS:

- sufficient evidence and analysis for determining whether to prepare an environmental impact statement or finding of no significant impact (FONSI);
- brief discussion of the purpose and need for the proposed action;
- a listing of the alternatives to the proposed action;
- brief discussion of the environmental effects of the proposed action and alternatives; and
- list of agencies and persons consulted.

Conclusion and Findings

NMFS issuance of an IHA to ONR authorizing take of marine mammals by Level B harassment incidental to ARA in the Beaufort and Chukchi Seas, consistent with provisions under the MMPA and incidental to the applicant's lawful activities, is considered a federal action that requires an environmental review of the ONR regulatory documents.

Based on this review and analysis, along with ONR's IHA application and OEA, and in accordance with 40 C.F.R. § 1506.3, NMFS is adopting the OEA to satisfy its independent NEPA requirements related to its decision to issue an IHA to the U.S. Navy pursuant to Section 101(a)(5)(D) of the MMPA. The analysis in this memorandum is limited to the determination that the OEA's analysis of impacts to marine mammals meets the standard for an adequate statement pursuant to CEQ's NEPA regulations and NOAA's NEPA procedures.