



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XE724]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Small Boat Harbor Preconstruction Activities (Geotechnical Surveys) in St. George, Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; issuance of an incidental harassment authorization.

SUMMARY: In accordance with the regulations implementing the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that NMFS has issued an incidental harassment authorization (IHA) to the United States Army Corps of Engineers (USACE) to incidentally harass marine mammals during geotechnical drilling in St. George, Alaska.

DATES: This authorization is effective from April 15, 2025 through June 15, 2025.

ADDRESSES: Electronic copies of the application and supporting documents, as well as a list of the references cited in this document, may be obtained online at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities>. In case of problems accessing these documents, please call the contact listed below.

FOR FURTHER INFORMATION CONTACT: Kate Fleming, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Background

The MMPA prohibits the “take” of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are proposed or, if the taking is limited to harassment, a notice of a proposed IHA is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other “means of effecting the least practicable adverse impact” on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to in shorthand as “mitigation”); and requirements pertaining to the monitoring and reporting of the takings. The definitions of all applicable MMPA statutory terms used above are included in the relevant sections below and can be found in section 3 of the MMPA (16 U.S.C. 1362) and NMFS regulations at 50 CFR 216.103.

Summary of Request

On October 30, 2024, NMFS received a request from USACE for an IHA to take marine mammals incidental to geotechnical surveys to be conducted as part of preconstruction activities associated with a new small boat harbor in St. George, Alaska. Following NMFS’ review of the application, and discussions between NMFS and USACE, the application was deemed adequate and complete on January 29, 2025. The USACE submitted a final revised version on February 19, 2025. The USACE’s request is

for take of northern fur seal, by Level A and Level B harassment and, of harbor seal, by Level B harassment only. Neither USACE nor NMFS expect serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

This IHA covers preconstruction activity associated with a larger project involving construction of a new small boat harbor.

Description of the Specified Activity

The USACE is in the preconstruction, engineering, and design phase for constructing a small boat harbor in St. George, Alaska. Between April 15, 2025 and June 15, 2025, USACE plans to conduct large penetration testing (LPT) and borehole drilling at 15 sites in the embayment between the Old Jetty west to North Rookery. USACE estimates that one hole will be completed each day, with the boring component taking 10 hours and the LPT component taking 1 hour. These methods would introduce underwater sounds that may result in take, by Level A and Level B harassment, of marine mammals.

A detailed description of the planned geotechnical surveys project is provided in the **Federal Register** notice for the proposed IHA (90 FR 11282; March 5, 2025). Since that time, no changes have been made to the planned activities. Therefore, a detailed description is not provided here. Please refer to that **Federal Register** notice for the description of the specific activity.

Comments and Responses

A notice of NMFS' proposal to issue an IHA to USACE was published in the **Federal Register** on March 5, 2025 (90 FR 11282). That notice described, in detail, USACE's activity, the marine mammal species that may be affected by the activity, and the anticipated effects on marine mammals. In that notice, we requested public input on the request for authorization described therein, our analyses, the proposed authorization, and any other aspect of the notice of proposed IHA, and requested that interested persons submit relevant information, suggestions, and comments.

During the 30-day public comment period, NMFS received comments from one commenter. NMFS' responses are provided below and all comments are available online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities>. Please see the comment submission for full details regarding the recommendations and supporting rationale.

Comment 1: A member of the public asserted that noise generated by the USACE's geotechnical surveys and use of a barge to transport and hold equipment has the potential to interfere with marine mammals. The commenter describes a variety of behavioral effects that anthropogenic noise can have on marine mammals, including flight response and masking, and that these responses can disrupt migration, communication and feeding. The commenter describes the detrimental impacts that would occur should the project lead to the reduction of prominent predators in the area (*i.e.*, killer whale and pinnipeds), and provides a description of trophic cascades. The commenter acknowledges the project is not long term in duration but suggests the project generates noise at frequencies that could impede mammalian function and potentially lead to death due to limited hunting ability, stress, or migration. The commenter suggests a resulting imbalance could impact the Alaskan seafood industry.

Response: NMFS appreciates the commenter's engagement in the IHA process, but notes that the commenter included a number of factual errors when describing the geotechnical surveys that constitute the small boat harbor preconstruction project in St. George, Alaska. The project activities and associated sound levels are described in the **Federal Register** notice for the proposed IHA (90 FR 11282; March 5, 2025). NMFS also clarifies that the harassment of killer whales is neither anticipated nor authorized in the IHA.

As described in the proposed IHA (90 FR 11282, March 5, 2025), NMFS finds that marine mammal harassment associated with this project would be limited to harbor

seal and northern fur seal, and the most likely impacts would be limited to short-term avoidance while the activities are occurring. We expect that any avoidance of the project areas by marine mammals would be temporary in nature and that any marine mammals that avoid the project areas during geotechnical surveys, which are planned for no more than 15 days, would not be permanently displaced. Additionally, indirect effects on marine mammal prey during the geotechnical surveys are expected to be minor, and these effects are unlikely to cause substantial effects on marine mammals at the individual level. NMFS notes that mitigation and monitoring prescribed will affect the least practicable adverse impact on marine mammals and their habitat.

Comment 2: The commenter expresses concern that the construction of the small boat harbor would reduce habitat for pinnipeds.

Response: NMFS appreciates the commenter's concerns regarding future small boat harbor construction but notes that NMFS' analysis is limited to small boat harbor preconstruction activities (geotechnical surveys). Should NMFS receive an application to harass marine mammals incidental to the construction of a small boat harbor at St. George, Alaska, NMFS will assess the impacts of the USACE's proposed activities on mammals and their habitat and only authorize take if NMFS is able to make the necessary findings to support the issuance of an authorization.

Comment 3: The commenter expresses concern that the future construction of a small boat harbor will increase the number of boats frequenting the area and that this will increase risk of vessel strikes and pollution, such as sewage, wastewater, bilge water, and trash. The commenter calls for increased boater safety regulations and pollution control within the harbor.

Response: NMFS appreciates the commenter's concerns regarding future small boat harbor construction but notes that NMFS' analysis is limited to small boat harbor

preconstruction activities (geotechnical surveys). NMFS notes concerns regarding boating safety and pollution are outside NMFS' purview under the MMPA.

Comment 4: The commenter calls for mitigation of the environmental impacts associated with the planned geotechnical drilling and implementation of a new harbor. The commenter provides some suggestions, which include: the establishment of Marine Protected Areas, increasing boating regulations, and using quieter drilling techniques to limit noise disturbance.

Response: NMFS concurs with the commenter's general recommendation to require mitigation to minimize impacts to marine mammals and their habitats, though the commenter's specific suggestions for mitigation are outside NMFS' purview under the MMPA. The USACE will establish shutdown zones and employ PSOs to monitor Level A and Level B harassment, conduct pre and post-activity monitoring, and implement shutdowns as necessary. PSOs will also observe, record, and report on the presence of marine mammals in the project area and at North Rookery, and include this information in a report to inform future decision-making. Please see the **Mitigation and Monitoring and Reporting** sections of this final IHA for additional details

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history of the potentially affected species. NMFS fully considered all of this information, and we refer the reader to these descriptions, instead of reprinting the information. Additional information regarding population trends and threats may be found in NMFS' Stock Assessment Reports (SARs; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) and more general information about these species (e.g., physical and behavioral descriptions) may be found on NMFS' website (<https://www.fisheries.noaa.gov/find-species>).

Table 1 lists all species or stocks for which take is expected and authorized for this activity and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS' SARs). While no serious injury or mortality is anticipated or authorized here, PBR and annual serious injury and mortality (M/SI) from anthropogenic sources are included here as gross indicators of the status of the species or stocks and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS' stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS' U.S. Alaska SARs. All values presented in table 1 are the most recent available at the time of publication (including from the draft 2024 SARs) and are available online at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>.

Table 1 – Species¹ that May be Impacted by the Specified Activities

Common name	Scientific name	Stock	ESA/MMPA status/ Strategic (Y/N) ²	Stock abundance (CV, Nmin, most recent abundance survey) ³	PBR	Annual M/S ⁴
Order – Odontoceti (toothed whales, dolphins, and porpoises)						
<i>Family Delphinidae</i>						

Killer whale	<i>Orcinus orca</i>	Eastern North Pacific Alaska Resident	-, -, N	1920 (N/A, 1,920, 2019) ⁵	19	1.3
		Eastern North Pacific Gulf of Alaska, Aleutian Islands and Bering Sea Transient	-, -, N	587 (N/A, 587, 2012) ⁵	5.9	0.8
Order Carnivora – Pinnipedia						
<i>Family Otariidae (eared and sea lions)</i>						
Northern fur seal	<i>Callorhinus ursinus</i>	Eastern Pacific	-, D, Y	612,765 ⁶ (0.2, 518,651, 2022)	11,151	296
Steller sea lion	<i>Eumetopias jubatus</i>	Western	E, D, Y	49,837 (N/A, 49,837, 2022) ⁷	299	267
<i>Family Phocidae (earless seals)</i>						
Harbor seal	<i>Phoca vitulina</i>	Pribilof Islands	-, -, N	229 ⁸ (N/A, 229, 2018)	7	0

¹Information on the classification of marine mammal species can be found on the web page for The Society for Marine Mammalogy's Committee on Taxonomy; [<https://marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies>].

²Endangered Species Act (ESA) status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

³NMFS marine mammal stock assessment reports online at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region>. CV is coefficient of variation; Nmin is the minimum estimate of stock abundance.

⁴These values, found in NMFS's SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial fisheries, ship strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value or range.

⁵Nest is based upon counts of individuals identified from photo-ID catalogs.

⁶Survey years = Sea Lion Rock-2014; St. Paul Is. – 2018, 2021, 2022; and St. George Is - 2018, 2022; Bogoslof Is. - 2019.

⁷Nest is best estimate of counts, which have not been corrected for animals at sea during abundance surveys. Estimates provided are for the U.S. only. The overall Nmin is 73,211 and overall PBR is 439.

⁸Nest is best estimate of counts, which have not been corrected for animals at sea during abundance surveys.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Not all marine mammal species have equal hearing capabilities (*e.g.*, Richardson *et al.*, 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007, 2019) recommended that marine mammals be divided into hearing groups based on directly measured (behavioral or auditory evoked potential techniques) or estimated hearing ranges (behavioral response data, anatomical modeling, *etc.*). Generalized hearing ranges were chosen based on the ~65 decibel (dB) threshold from composite audiograms, previous analyses in NMFS (2018), and/or data from Southall *et al.* (2007) and Southall *et al.* (2019). We note that the names of two hearing groups and the generalized hearing ranges of all marine mammal hearing groups have been recently updated (NMFS 2024) as reflected below in table 2.

Table 2 -- Marine Mammal Hearing Groups (NMFS, 2024)

Hearing Group	Generalized Hearing Range*
Low-frequency (LF) cetaceans (baleen whales)	7 Hz to 36 kHz**
High-frequency (HF) cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales)	150 Hz to 160 kHz
Very High-frequency (VHF) cetaceans (true porpoises, <i>Kogia</i> , river dolphins, Cephalorhynchid, <i>Lagenorhynchus cruciger</i> & <i>L. australis</i>)	200 Hz to 165 kHz
Phocid pinnipeds (PW) (underwater) (true seals)	40 Hz to 90 kHz
Otariid pinnipeds (OW) (underwater) (sea lions and fur seals)	60 Hz to 68 kHz
<p>* Represents the generalized hearing range for the entire group as a composite (<i>i.e.</i>, all species within the group), where individual species' hearing ranges may not be as broad. Generalized hearing range chosen based on ~65 dB threshold from composite audiogram, previous analysis in NMFS 2018, and/or data from Southall <i>et al.</i> 2007; Southall <i>et al.</i> 2019. Additionally, animals are able to detect very loud sounds above and below that “generalized” hearing range.</p> <p>** Hertz (Hz) and Kilohertz (kHz).</p>	

For more detail concerning these groups and associated frequency ranges, please see NMFS (2024) for a review of available information.

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

The effects of underwater noise from construction activities have the potential to result in behavioral harassment of marine mammals in the vicinity of the project area.

The notice of proposed IHA (90 FR 11282, March 5, 2025) included a discussion of the effects of anthropogenic noise on marine mammals and the potential effects of underwater noise from USACE’s geotechnical survey activity on marine mammals and their habitat. That information and analysis is referenced in this final IHA determination and is not repeated here; please refer to the notice of proposed IHA (90 FR 11282, March 5, 2025).

Estimated Take of Marine Mammals

This section provides an estimate of the number of incidental takes authorized through the IHA, which will inform NMFS’ consideration of “small numbers,” the negligible impact determinations, and impacts on subsistence uses.

Harassment is the only type of take expected to result from these activities. Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines “harassment” as any act of pursuit, torment, or annoyance, which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

Authorized takes are primarily by Level B harassment, as use of acoustic sources (LPT and borehole drilling) has the potential to result in disruption of behavioral patterns for individual marine mammals. There is also some potential for auditory injury (AUD INJ) (Level A harassment) to result, for northern fur seal because fur seals are common in the immediate vicinity of the planned activity and predicted AUD INJ are larger than planned shutdown zones. AUD INJ is unlikely to occur for other species. The planned mitigation and monitoring measures are expected to minimize the severity of the taking to the extent practicable.

As described previously, no serious injury or mortality is anticipated or authorized for this activity. Below, we describe how the authorized take numbers are estimated.

For acoustic impacts, generally speaking, we estimate take by considering: (1) acoustic criteria above which NMFS believes the best available science indicates marine mammals will likely be behaviorally harassed or incur some degree of AUD INJ; (2) the area or volume of water that will be ensonified above these levels in a day; (3) the density or occurrence of marine mammals within these ensonified areas; and, (4) the number of days of activities. We note that while these factors can contribute to a basic calculation to provide an initial prediction of potential takes, additional information that can qualitatively inform take estimates is also sometimes available (*e.g.*, previous monitoring

results or average group size). Below, we describe the factors considered here in more detail and present the take estimates.

Acoustic Criteria

NMFS recommends the use of acoustic criteria that identify the received level of underwater sound above which exposed marine mammals would be reasonably expected to be behaviorally harassed (equated to Level B harassment) or to incur AUD INJ of some degree (equated to Level A harassment). We note that the criteria for AUD INJ, as well as the names of two hearing groups, have been recently updated (NMFS 2024) as reflected below in the Level A harassment section.

Level B Harassment—Though significantly driven by received level, the onset of behavioral disturbance from anthropogenic noise exposure is also informed to varying degrees by other factors related to the source or exposure context (*e.g.*, frequency, predictability, duty cycle, duration of the exposure, signal-to-noise ratio, distance to the source), the environment (*e.g.*, bathymetry, other noises in the area, predators in the area), and the receiving animals (hearing, motivation, experience, demography, life stage, depth) and can be difficult to predict (*e.g.*, Southall *et al.*, 2007, 2021; Ellison *et al.*, 2012). Based on what the available science indicates and the practical need to use a threshold based on a metric that is both predictable and measurable for most activities, NMFS typically uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS generally predicts that marine mammals are likely to be behaviorally harassed in a manner considered to be Level B harassment when exposed to underwater anthropogenic noise above root-mean-squared pressure received levels (RMS SPL) of 120 dB (referenced to 1 micropascal (re 1 μ Pa)) for continuous (*e.g.*, vibratory pile driving, drilling) and above RMS SPL 160 dB re 1 μ Pa for non-explosive impulsive (*e.g.*, seismic airguns) or intermittent (*e.g.*, scientific sonar) sources. Generally speaking, Level B harassment take estimates based on these behavioral

harassment thresholds are expected to include any likely takes by temporary threshold shift (TTS) as, in most cases, the likelihood of TTS occurs at distances from the source less than those at which behavioral harassment is likely. TTS of a sufficient degree can manifest as behavioral harassment, as reduced hearing sensitivity and the potential reduced opportunities to detect important signals (conspecific communication, predators, prey) may result in changes in behavior patterns that would not otherwise occur.

USACE's geotechnical survey activities includes the use of continuous (borehole drilling) and impulsive (LPT) sources, and therefore the RMS SPL thresholds of 120 and 160 dB re 1 μ Pa, respectively are applicable.

Level A Harassment—NMFS' Updated Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 3.0) (Updated Technical Guidance, 2024) identifies dual criteria to assess AUD INJ (Level A harassment) to five different underwater marine mammal groups (based on hearing sensitivity) as a result of exposure to noise from two different types of sources (impulsive or non-impulsive). USACE's planned activity includes the use of impulsive (*i.e.*, LPT) and non-impulsive (*i.e.*, borehole drilling) sources.

The 2024 Updated Technical Guidance criteria include both updated thresholds and updated weighting functions for each hearing group. The thresholds are provided in table 3. The references, analysis, and methodology used in the development of the criteria are described in NMFS' 2024 Updated Technical Guidance, which may be accessed at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance-other-acoustic-tools>.

Table 3 -- Thresholds Identifying the Onset of Auditory Injury

	AUD INJ Onset Acoustic Thresholds* (Received Level)	
Hearing Group	Impulsive	Non-impulsive
Low-Frequency (LF) Cetaceans	<i>Cell 1</i> $L_{pk,flat}$: 222 dB $L_{E,LF,24h}$: 183 dB	<i>Cell 2</i> $L_{E,LF,24h}$: 197 dB
High-Frequency (HF) Cetaceans	<i>Cell 3</i> $L_{pk,flat}$: 230 dB $L_{E,HF,24h}$: 193 dB	<i>Cell 4</i> $L_{E,HF,24h}$: 201 dB
Very High-Frequency (VHF) Cetaceans	<i>Cell 5</i> $L_{pk,flat}$: 202 dB $L_{E,VHF,24h}$: 159 dB	<i>Cell 6</i> $L_{E,VHF,24h}$: 181 dB
Phocid Pinnipeds (PW) (Underwater)	<i>Cell 7</i> $L_{pk,flat}$: 223 dB $L_{E,PW,24h}$: 183 dB	<i>Cell 8</i> $L_{E,PW,24h}$: 195 dB
Otariid Pinnipeds (OW) (Underwater)	<i>Cell 9</i> $L_{pk,flat}$: 230 dB $L_{E,OW,24h}$: 185 dB	<i>Cell 10</i> $L_{E,OW,24h}$: 199 dB
<p>*Dual metric criteria for impulsive sounds: Use whichever criteria results in the larger isopleth for calculating AUD INJ onset. If a non-impulsive sound has the potential of exceeding the peak sound pressure level criteria associated with impulsive sounds, the PK SPL criteria are recommended for consideration for non-impulsive sources.</p> <p>Note: Peak sound pressure level ($L_{p,0-pk}$) has a reference value of 1 μPa, and weighted cumulative sound exposure level ($L_{E,p}$) has a reference value of 1 μPa²s. In this table, criteria are abbreviated to be more reflective of International Organization for Standardization (ISO) standards (ISO 2017; ISO 2020). The subscript “flat” is being included to indicate peak sound pressure are flat weighted or unweighted within the generalized hearing range of marine mammals underwater (<i>i.e.</i>, 7 Hz to 165 kHz). The subscript associated with cumulative sound exposure level criteria indicates the designated marine mammal auditory weighting function (LF, HF, and VHF cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The weighted cumulative sound exposure level criteria could be exceeded in a multitude of ways (<i>i.e.</i>, varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these criteria will be exceeded.</p>		

Ensonified Area

Here, we describe operational and environmental parameters of the activity that are used in estimating the area ensonified above the acoustic thresholds, including source levels and transmission loss coefficient.

The sound field in the project area is the existing background noise plus additional construction noise from the planned project. Marine mammals are expected to

be affected via sound generated by the primary components of the project (*i.e.*, LPT and borehole drilling).

Sound Source Levels of Planned Activities - The intensity of geotechnical survey activity sounds is greatly influenced by factors such as the size of hammers and the physical environment (*e.g.*, sediment type) in which the activity takes place. The USACE evaluated sound source level (SL) measurements available for similar geotechnical surveys to determine suitable proxies for the planned activities. The proxy source levels initially proposed by USACE were less conservative compared to what might be realized by the actual activities taking place, as the values were derived in one case, from a project that was conducted in a dissimilar sediment type from a jacked up drill rig, and in another case, from a project that did not report its parameters and environmental characteristics. NMFS has instead relied on alternative proxy SLs in our evaluation of the impacts of the USACE’s planned activities (table 1 in the proposed FRN) on marine mammals, with USACE concurrence.

Table 4 -- Estimates of Mean Underwater Sound Levels Generated During Geotechnical Surveys

	dB RMS	dB Peak	dB SEL	Reference Distance (m)	Reference
LPT	197	213	182	1	Huang <i>et al.</i> , 2023
Borehole Drilling	155.9	N/A	N/A		

Note: dB peak = peak sound level; rms = root mean square; SEL = sound exposure level.

Transmission Loss (TL) is the decrease in acoustic intensity as an acoustic pressure wave propagates out from a source. *TL* parameters vary with frequency, temperature, sea conditions, current, source and receiver depth, water depth, water chemistry, and bottom composition and topography. The general formula for underwater *TL* is:

$$TL = B \times \text{Log}_{10} (R_1/R_2), \text{ where}$$

TL = transmission loss in dB

B = transmission loss coefficient

R_1 = the distance of the modeled SPL from the driven pile, and

R_2 = the distance from the driven pile of the initial measurement

Absent site-specific acoustical monitoring with differing measured TL , a practical spreading value of 15 is used as the TL coefficient in the above formula. Site-specific TL data for the Sitka Sound are not available; therefore, the default coefficient of 15 is used to determine the distances to the Level A harassment and Level B harassment thresholds.

The ensonified area associated with Level A harassment is more technically challenging to predict due to the need to account for a duration component. Therefore, NMFS developed an optional User Spreadsheet tool to accompany the 2024 Updated Technical Guidance that can be used to relatively simply predict an isopleth distance for use in conjunction with marine mammal density or occurrence to help predict potential takes. We note that because of some of the assumptions included in the methods underlying this optional tool, we anticipate that the resulting isopleth estimates are typically going to be overestimates of some degree, which may result in an overestimate of potential take by Level A harassment. However, this optional tool offers the best way to estimate isopleth distances when more sophisticated modeling methods are not available or practical. For stationary sources such as geotechnical survey activities (LPT and borehole drilling), the optional User Spreadsheet tool predicts the distance at which, if a marine mammal remained at that distance for the duration of the activity, it would be expected to incur AUD INJ. Inputs used in the optional User Spreadsheet tool (e.g., number of holes per day, duration, and strikes/hole) are presented in table 5 and the resulting estimated isopleths, are reported below in table 6.

Table 5 -- User Spreadsheet Inputs

	Impact	Vibratory
	LPT	Borehole Drilling
Spreadsheet Tab Used	E.1) Impact Pile Driving	A.1) Vibratory Pile Driving
Sound Source Level (SL)	182 SEL	155.9 RMS
Transmission Loss Coefficient	15	
Weighting Factor Adjustment (kHz)	2	2.5
Activity Duration per day (minutes)	60	540
Number of strikes per pile	3,600	N/A

Number of piles per day	1
Distance of sound pressure level measurement	1

Table 6 -- Level A Harassment and Level B Harassment Isopleths and Associated Areas from Geotechnical Surveys

Activity Type	Level A harassment: isopleths (m)					Level B harassment isopleth (m)
	LF	HF	VHF	PW	OW	
LPT	200.5	25.6	310.2	178.1	66.4	293
Drilling	1.8	0.7	1.5	2.3	0.8	247

Abbreviations: LF = low-frequency cetaceans, HF = high-frequency cetaceans, VHF = very high-frequency cetaceans, PW = phocid pinnipeds in water, OW = otariid pinnipeds in water.

Level A harassment zones are typically smaller than Level B harassment zones.

Calculation of Level A harassment isopleths include a duration component, which in the case of LPT, is estimated through the total number of daily strikes and the associated pulse duration. For a stationary sound source such as LPT, we assume there that an animal is exposed to all of the strikes expected within a 24-hour period. Calculation of a Level B harassment zone does not include a duration component.

Marine Mammal Occurrence and Take Estimation

In this section, we provide information about the occurrence of marine mammals, including density or other relevant information which will inform the take calculations. We also describe how the information provided above is synthesized to produce a quantitative estimate of the take that is reasonably likely to occur and authorized.

Potential exposures to LPT and borehole drilling noise for each acoustic threshold were estimated using data reported by the USACE from monitoring events conducted on 5 days across April and June 2024 (table 7). Northern fur seal were the only pinnipeds observed on land. The USACE reported an estimate of a single daily point count of the number of northern fur seals present at north rookery and along the shoreline towards the Old Jetty. For pinnipeds observed in the water (northern fur seal, Steller sea lion, and harbor seal), USACE reported the total number of each species observed over the course of a day. Individual sightings of pinniped groups in the water were not reported. Northern

fur seal in the water were described to be moving from west to east. Steller sea lion were described to be observed near the Old Jetty in groups up to 8 to 10, and were passing through rather than lingering. On 3 days, groups of up to eight harbor seal were observed inside the Old Jetty.

Table 7 -- Monitoring Data Collected and Reported by USACE between Old Jetty and North Rookery in 2024

Date	Hours of observation	Total hours of observation	Daily total marine mammals observed in water ¹			Daily estimates of marine mammals observed on land		
			NOFS	HASL	STSL	NOFS ²	HASL	STSL
4/23/2024	14:30 – 22:00	7.5	16	6	3	No Data	No Data	No Data
4/24/2024	08:15 – 22:30	14.25	22	8	11	126	0	0
4/25/2024	08:30 – 23:45	15.25	32	3	14	No Data	No Data	No Data
6/14/2024	18:00 – 0000	6	98	0	5	245	0	0
6/15/2024	09:00 – 23:45	13.75	110	0	4	300	0	0

¹Individual sightings of groups of marine mammals throughout the observation period were not reported.

²The USACE indicated that they counted northern fur seal hauled out along approximately 1/3 of the rookery and extrapolated this number to estimate the total number of seals present along the rest of the shoreline.

The take estimate was determined using the following equation: take estimate = number of expected animals * number of planned survey days.

Northern Fur Seal

Initially, the USACE used both land-based and in-water counts to estimate the number of expected northern fur seals to be taken each survey day. For the six boreholes closest to North Rookery, USACE used the maximum number estimated on the beach across all five surveys (n = 300) and maximum number estimated in the water across all five surveys (n = 110). For the remaining nine boreholes, USACE assumed half the maximum number on the shore across all five surveys would be taken (n = 150) and the maximum number estimated in the water across all five surveys (n = 110). NMFS agrees

with USACE's rationale for estimating take using on-land numbers, but disagrees that in-water counts should be used in take estimates. These observations were not recorded in concert with land-based observations and as such would double-count the number of northern fur seals that might be taken. Additionally since fine-scale data regarding pinniped use in the area are not available, NMFS finds that it is more appropriate to base take estimates on the maximum number estimated on land for all borehole locations and the USACE agreed. The USACE concurred with this approach. As noted previously, NMFS assumes, that the number of hauled out northern fur seals at north rookery represent approximately one-third of the total population of northern fur seal in the area (Williams 2024, personal communication), and as such, the maximum count of land-based seals is multiplied by 3. As such, a total of 13,500 takes by Level B harassment of northern fur seal are authorized ($15 \text{ construction days} \times 300 \text{ northern fur seals} \times 3 = 13,500 \text{ takes by Level B harassment}$).

During LPT activities, the Level A harassment zone (66.4 m) is larger than the shutdown zone (50 m) for northern fur seal. As such, and given the frequent occurrence of fur seals in the immediate vicinity of the project area, it is possible that northern fur seal may enter the Level A harassment zone and stay long enough to incur AUD INJ before exiting. The ratio of the Level A harassment area that exceeds the shutdown zone (0.007 square kilometers (km²)) to the largest Level B harassment area (0.27 km²) is 0.026. This activity is predicted to take place 10 percent of each survey day. As such, 35 takes by Level A harassment are authorized ($0.026 \times 900 \text{ northern fur seal} \times 15 \text{ survey days} \times .10 = 35 \text{ takes by Level A harassment}$).

Any individuals exposed to the higher levels associated with the potential for permanent threshold shift (PTS) closer to the source might also be behaviorally disturbed; however, for the purposes of quantifying take we do not count those exposures of one individual as a take by both Level A harassment and Level B harassment. Therefore,

NMFS authorized 35 takes by Level A harassment and 13,465 takes by Level B harassment for northern fur seal, for a total of 13,500 takes.

Harbor Seal

To estimate take for harbor seal, USACE used the maximum number of harbor seal observed in one day, across all survey days ($n = 8$). Because harbor seal are uncommon in the area and were only observed near the Old Jetty, USACE estimated take by Level B harassment to occur on 7 of the 15 construction days to correspond with the surveys that are completed closer to the Old Jetty. However, since fine-scale data regarding harbor seal use in the area are not available, NMFS finds it more appropriate to estimate that take by Level B harassment might occur at any of the borehole locations, and USACE agreed. As such, 120 takes by Level B harassment are authorized (8 harbor seal x 15 construction days). No takes by Level A harassment are requested or authorized given the relative rarity of harbor seal occurrence in conjunction with planned shutdown requirements.

Steller Sea Lion

The spring-time occurrence of Steller sea lions on St. George Island near the project area is highly variable across years. Typically there are no Steller sea lions present on land adjacent to the bay where the project is to occur in the spring, but occasionally they haul out at sites across North Rookery (primarily the western end, but extending east towards the work site), East Reef rookery, and East Cliffs rookery in groups of up to 100 (Williams 2024, personal communication). When present, they tend to travel through the project area and do not linger. During monitoring events conducted on 5 days in April and June 2024, USACE observed 3 to 14 Steller sea lions traveling near the western portion of the project area each survey day. USACE plans to shut down upon observation of Steller sea lions. Given the plan to shut down, and because Steller

sea lions inconsistently occur in the project area, are conspicuous, and do not tend to linger, no takes are expected to occur and none are authorized.

Killer Whale

Killer whale have been observed in nearshore habitats of the Pribilofs including from viewing locations near the project site. Killer whale are conspicuous and USACE plans to shut down upon observation of killer whale nearing the Level B harassment zone. Shutdown zones for killer whale have been established at 300 meters (m) during borehole drilling and 400 m during LPT, whereas the calculated Level B harassment zones are 247 m and 293 m, respectively. As such, no takes by Level B or Level A harassment is requested or authorized.

Table 8 -- Take by Stock and Harassment Type and as a Percentage of Stock Abundance

Species	Stock	Level A harassment	Level B harassment	Take as percentage of Stock Abundance
Harbor Seal	Pribilof	0	120	¹ 52%
Northern Fur Seal	E. Pacific	35	13,465	2%
Steller Sea Lion	Western DPS	0	0	0
Killer Whale	Eastern North Pacific Alaska Resident	0	0	0
	Eastern North Pacific Gulf of Alaska, Aleutian Islands and Bering Sea Transient	0	0	0

¹These numbers represent the estimated incidents of take, not the number of individuals taken (see **Small Numbers** section).

Mitigation

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses. NMFS regulations require applicants for incidental take authorizations to include information

about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, NMFS considers two primary factors:

(1) The manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), the likelihood of effective implementation (probability implemented as planned), and;

(2) The practicability of the measures for applicant implementation, which may consider such things as cost, and impact on operations.

Mitigation for Marine Mammals and Their Habitat

Temporal Work Restriction—Temporal restrictions in places where marine mammals are concentrated, engaged in biologically important behaviors, and/or present in sensitive life stages are effective measures for reducing the magnitude and severity of human impacts. NMFS is requiring a temporal work restriction to minimize the consequences of noise exposure to northern fur seal at North Rookery incidental to USACE's geotechnical surveys. This temporal work restriction is expected to greatly reduce the number and severity of northern fur seal takes that would otherwise occur should activities be conducted after arrival of pregnant females to the area in mid-June.

Shutdown Zones—For all in-water survey activities, USACE will implement shutdowns within designated zones. The purpose of a shutdown zone is generally to define an area within which shutdown of the activity will occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). Shutdown zones vary based on the activity type and marine mammal hearing group (table 9). For harbor seal, the shutdown zones are based on the estimated Level A harassment isopleth. For northern fur seal, the shutdown zone for LPT is set at 50 m (slightly less than the estimated Level A harassment zone of 66 m) to minimize practicability concerns, *i.e.*, that increased shutdowns may result in failure to complete the project in a timely fashion (given that non-breeding male northern fur seal are common in the project area).

Table 9 -- Shutdown Zones

Activity	Shutdown Zones (m)					
	LF	HF	VHF	PW	OW	
					Northern Fur Seal	Other OW
Borehole Drilling	300			10	10	300
LPT	400			200	50	400

Construction supervisors and crews, Protected Species Observers (PSOs), and relevant USACE staff must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary to avoid direct physical interaction. If an activity is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone indicated in table 9, or 15 minutes have passed without re-detection of the animal.

Finally, construction activities must be halted upon observation of a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met entering or within any

harassment zone. If a marine mammal species not covered under the IHA enters a harassment zone, all in-water activities will cease until the animal leaves the zone or has not been observed for at least 15 minutes, and NMFS would be notified about species and precautions taken. Borehole drilling and LPT will proceed if the unauthorized species is observed leaving the harassment zone or if 15 minutes have passed since the last observation.

Protected Species Observers (PSOs)—The number and placement of PSOs during all construction activities (described in the **Monitoring and Reporting** section) would ensure that the entire shutdown zone is visible during all in-water LPT and borehole drilling activities. In such cases, PSOs will monitor the shutdown zone and beyond to the greatest extent practicable. USACE will employ at least two PSOs for all geotechnical survey activities.

Monitoring for Level A and Level B Harassment—PSOs will monitor the shutdown zones and beyond to the extent that PSOs can see. Monitoring beyond the shutdown zones enables observers to be aware of and communicate the presence of marine mammals in the project areas outside the shutdown zones and thus prepare for a potential cessation of activity should the animal enter the shutdown zone. If a marine mammal enters either harassment zone, PSOs will document the marine mammal's presence and behavior.

Pre-and Post-Activity Monitoring—Prior to the start of daily in-water construction activity, or whenever a break in geotechnical survey activities of 30 minutes or longer occurs, PSOs will observe the shutdown zones and as much as the harassment zones as possible for a period of 30 minutes. Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones are clear of marine mammals. If the shutdown zone is obscured by fog or poor lighting conditions, in-water construction activity will not be initiated until the

entire shutdown zone is visible. Geotechnical survey activities may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals. If a marine mammal is observed entering or within shutdown zones, geotechnical survey activity must be delayed or halted. If geotechnical survey activities are delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal. If a marine mammal for which take by Level B harassment is authorized is present in the Level B harassment zone, activities may begin.

Soft Start—Note that while NMFS typically requires soft starts for impact pile driving activities, USACE indicated this mitigation measure is not appropriate for LPT because it is not possible to decrease the impact from the LPT because the number of blows per fixed distance driven is an indicator of soil properties that are used in design.

Based on our evaluation of the applicant's planned measures, NMFS has determined that the mitigation measures provide the means of effecting the least practicable impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for subsistence..

Monitoring and Reporting

In order to issue an IHA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of such taking. The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present while conducting the activities. Effective reporting is critical both to

compliance as well as ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

- Occurrence of marine mammal species or stocks in the area in which take is anticipated (*e.g.*, presence, abundance, distribution, density);
 - Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.*, source characterization, propagation, ambient noise); (2) affected species (*e.g.*, life history, dive patterns); (3) co-occurrence of marine mammal species with the activity; or (4) biological or behavioral context of exposure (*e.g.*, age, calving or feeding areas);
 - Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors;
 - How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2) populations, species, or stocks;
 - Effects on marine mammal habitat (*e.g.*, marine mammal prey species, acoustic habitat, or other important physical components of marine mammal habitat);
- and,
- Mitigation and monitoring effectiveness.

Visual Monitoring—Marine mammal monitoring during geotechnical survey activities must be conducted by NMFS-approved PSOs in a manner consistent with the following:

- PSOs must be independent (*i.e.*, not construction personnel), and have no other assigned tasks during monitoring periods;

- At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization;

- Other PSOs may substitute other relevant experience, education (degree in biological science or related field) or training for experience performing the duties of a PSO during construction activities pursuant to a NMFS-issued incidental take authorization;

- Where a team of three or more PSOs is required, a lead observer or monitoring coordinator will be designated. The lead observer will be required to have prior experience working as a marine mammal observer during construction activity pursuant to a NMFS-issued incidental take authorization; and,

- PSOs must be approved by NMFS prior to beginning any activity subject to this IHA.

PSOs should also have the following additional qualifications:

- Ability to conduct field observations and collect data according to assigned protocols;

- Experience or training in the field identification of marine mammals, including identification of behaviors;

- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;

- Writing skills sufficient to prepare a report of observations including, but not limited to, the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior; and,

- Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

Visual Monitoring of the Project Area—Visual monitoring of the project area will be conducted by a minimum of two trained PSOs positioned at suitable vantage points (see figure 3-2 in the Marine Mammal Mitigation and Monitoring Plan). During all geotechnical activities, at least two PSOs will be assigned to each active survey location to monitor the shutdown zones and harassment zones. At least one of these PSOs will observe from the cliffs adjacent to the project site. When conducting geotechnical survey activities at offshore locations, one of these PSOs will be placed on the barge.

Monitoring of the project area will be conducted 30 minutes before, during, and 30 minutes after all in water construction activities. In addition, PSOs will record all incidents of marine mammal occurrence, regardless of distance from activity, and will document any behavioral reactions in concert with distance from geotechnical survey activities. Geotechnical survey activities include the time to conduct LPT and borehole drilling, as long as the time elapsed between uses of the geotechnical survey equipment is no more than 30 minutes.

Visual Monitoring of North Rookery—To inform take estimates for future construction activities, PSOs will also conduct daily morning counts of hauled out pinnipeds at North Rookery, from the Northern Point of north Rookery and following the rocky shoreline to the south, during the project period and in the morning, prior to commencing work. USACE will determine the site specific counting area each day based on accessibility, any need to avoid seals above the cliffs, and visibility below the cliffs. USACE will provide coordinates identifying the PSO monitoring location and the start and end location of where counts are conducted each day.

Reporting

USACE will submit a draft marine mammal monitoring report to NMFS within 90 days after the completion of geotechnical survey activities, or 60 days prior to a requested date of issuance of any future IHAs for the project, or other projects at the same location, whichever comes first. The marine mammal monitoring report will include an overall description of work completed, a narrative regarding marine mammal sightings during all visual monitoring, and associated PSO data sheets. Specifically, the report will include:

- Dates and times (begin and end) of all marine mammal monitoring;
- Geotechnical survey activities occurring during each daily observation period, including: (1) the number and type of survey activities completed and the method (*e.g.*, LPT or borehole drilling); and, (2) total duration of driving time for each survey location (borehole drilling) and number of strikes for each survey location (LPT);
- PSO locations during marine mammal monitoring;
- Start and end location of monitoring area associated with Visual Monitoring of North Rookery morning counts;
- Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;
- During all monitoring efforts, upon observation of a marine mammal, the following information: (1) name of PSO who sighted the animal(s) and PSO location and activity at time of sighting; (2) time of sighting; (3) identification of the animal(s) (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species; (4) distance and location of each observed marine mammal relative to the survey location for each

sighting; (5) estimated number of animals (min/max/best estimate); (6) estimated number of animals by cohort (adults, juveniles, neonates, group composition, *etc.*);

- During monitoring associated with geotechnical activities only, the following information (1) animal's closest point of approach and estimated time spent within the harassment zone ; and, (2) description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching) ;

- Number of marine mammals detected within the harassment zones, by species ; and,

- Detailed information about implementation of any mitigation (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

A final report must be prepared and submitted within 30 calendar days following receipt of any NMFS comments on the draft report. If no comments are received from NMFS within 30 calendar days of receipt of the draft report, the report shall be considered final. All PSO data will be submitted electronically in a format that can be queried, such as a spreadsheet or database, and will be submitted with the draft marine mammal report.

In the event that personnel involved in the geotechnical activities discover an injured or dead marine mammal, the Holder must report the incident to the Office of Protected Resources (OPR), NMFS (*PR.ITP.MonitoringReports@noaa.gov* and *itp.fleming@noaa.gov*) and Alaska Regional Stranding network (877-925-7773) as soon as feasible. If the death or injury was clearly caused by the specified activity, the Holder must immediately cease the activities until NMFS OPR is able to review the

circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of this IHA. The Holder must not resume their activities until notified by NMFS. The report must include the following information:

- Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
- Species identification (if known) or description of the animal(s) involved;
- Condition of the animal(s) (including carcass condition if the animal is dead);
- Observed behaviors of the animal(s), if alive;
- If available, photographs or video footage of the animal(s); and,
- General circumstances under which the animal was discovered.

Negligible Impact Analysis and Determination

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be “taken” through harassment, NMFS considers other factors, such as the likely nature of any impacts or responses (*e.g.*, intensity, duration), the context of any impacts or responses (*e.g.*, critical reproductive time or location, foraging impacts affecting energetics), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess 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 impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the 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).

To avoid repetition the majority of our analysis applies to all the species listed in table 1, given that many of the anticipated effects of this project on different marine mammal stocks are expected to be relatively similar in nature. Where there are meaningful differences between species or stocks, or groups of species, in anticipated individual responses to activities, impact of expected take on the population due to differences in population status, or impacts on habitat, they are described independently in the analysis below.

Geotechnical surveys associated with the project, as outlined previously, have the potential to disturb or displace marine mammals. Specifically, the specified activities may result in take, in the form of Level B and Level A harassment, from underwater sounds generated by borehole drilling and LPT. Potential takes could occur if individuals are present in the ensonified zone when these activities are underway.

Takes by Level B harassment would be due to potential behavioral disturbance and TTS. Takes by Level A harassment would be due to AUD INJ. No serious injury or mortality is expected, even in the absence of required mitigation measures, given the nature of the activities. The potential for harassment will be further minimized through the implementation of planned mitigation measures (see **Mitigation** section). A low amount of take by Level A harassment is expected for northern fur seal (n=35) to account for the possibility that an animal would enter the Level A harassment zone and remain within that zone for a duration long enough to incur AUD INJ before moving away. Any take by Level A harassment of northern fur seal is expected to arise from, at most, a small

degree of PTS (*i.e.*, minor degradation of hearing capabilities within regions of hearing that align most completely with the energy produced by LPT such as the low-frequency region below 2 kHz), not severe hearing impairment or impairment within the ranges of greatest hearing sensitivity. Animals would need to be exposed to higher levels and/or longer duration than are expected to occur here in order to incur any more than a small degree of PTS. Some subset of northern fur seal or harbor seal that are behaviorally harassed could also simultaneously incur some small degree of TTS for a short duration of time. However, since the hearing sensitivity of individuals that incur TTS is expected to recover completely within minutes to hours, it is unlikely that the brief hearing impairment would affect the individual's long-term ability to forage and communicate with conspecifics, and would therefore not likely impact reproduction or survival of any individual marine mammal, let alone adversely affect rates of recruitment or survival of the species or stock. Likewise, due to the small degree anticipated, any PTS potential would not be expected to affect the reproductive success or survival of any individuals, much less result in adverse impacts on the species or stock.

Effects on individuals that are taken by Level B harassment in the form of behavioral disruption, on the basis of reports in the literature as well as monitoring from other similar activities, would likely be limited to reactions such as avoidance, increased swimming speeds, increased surfacing time, or decreased foraging (if such activity were occurring) (*e.g.*, Thorson and Reyff, 2006). Most likely, individuals would simply move away from the sound source and temporarily avoid the area where geotechnical surveys are occurring. If sound produced by project activities is sufficiently disturbing, animals are likely to simply avoid the area while the activities are occurring. We expect that any avoidance of the project areas by marine mammals would be temporary in nature and that any marine mammals that avoid the project areas during geotechnical surveys would not be permanently displaced. Indirect effects on marine mammal prey during the

geotechnical surveys are expected to be minor, and these effects are unlikely to cause substantial effects on marine mammals at the individual level. Given the time of year in which project activities are planned, short-term avoidance of the project areas and energetic impacts of interrupted foraging or other important behaviors is unlikely to affect the reproduction or survival of individual marine mammals, and the effects of behavioral disturbance on individuals is not likely to accrue in a manner that would affect the rates of recruitment or survival of any affected stock.

For harbor seal, take would occur within a limited, relatively confined area of the stock's range, which is not of particular importance for harbor seal that may occur there. Given the availability of suitable habitat nearby, any displacement of marine mammals from the project areas is not expected to affect marine mammals' fitness, survival, and reproduction due to the limited geographic area that would be affected in comparison to available habitat elsewhere on the island. Additionally, NMFS anticipates that the prescribed mitigation will minimize the duration and intensity of expected harassment events.

While the project site is located adjacent to the largest northern fur seal rookery in the world, the exposure of northern fur seal to sound from the planned activities would be minimized by the time of year the work is planned and required mitigation measures (*e.g.*, shutdown zones). Beginning in April, adult males will land at a number of sites where they begin to determine which site to establish their breeding territory before the arrival of females in mid-June and July. Non-breeding aged males will land and haul out along the rocky shoreline adjacent to the Access Ramp labeled in figure 4-3 in the USACE's application, while, territorial males will occupy and defend prime breeding territories before females arrive in mid-June and July. Pregnant females arrive around mid-June each year. They give birth just days after arrival on land and then mate (NMFS,

2024). Pups are nursed until weaning (about 4 months) and leave their breeding site before their mothers to forage independently for the first time.

All in-water geotechnical survey activities will be conducted between April 15 and June 15. The planned temporal work restriction is established to ensure that project activities do not impact northern fur seals during sensitive life stages (*i.e.*, when pregnant and pupping northern fur seals are present). The temporal work restriction would also greatly reduce the overall number of takes of northern fur seal as fewer northern fur seal are present in the spring compared to the summer.

While the project site is adjacent to the largest northern fur seal rookery in the world, the effects of the activities on marine mammal habitat generally, such as sedimentation and impacts to the availability of prey species, are expected to be limited both spatially and temporally, constrained to the immediate area around each geotechnical survey location and returning to baseline levels quickly. Some fish may leave the area of disturbance, thus temporarily impacting foraging opportunities for non-breeding male northern fur seals (territorial males do not forage after establishing territories) and harbor seal in a limited portion of the foraging range; but, because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

In addition, it is unlikely that minor noise effects in a small, localized area of habitat would have any effect on each stock's ability to recover. In combination, we believe that these factors, as well as the available body of evidence from other similar activities, demonstrate that the potential effects of the specified activities would have only minor, short-term effects on individuals. The specified activities are not expected to impact rates of recruitment or survival and would therefore not result in population-level impacts.

In summary and as described above, the following factors primarily support our determination that the impacts resulting from this activity are not expected to adversely affect any of the species or stocks through effects on annual rates of recruitment or survival:

- No serious injury or mortality is anticipated or authorized;
- Level A harassment, for northern fur seal only, would be very small amounts of a low degree;
- Anticipated take by Level B harassment are relatively low for all stocks;
- Level B harassment would be primarily in the form of behavioral disturbance, resulting in avoidance of the project areas around where borehole drilling or LPT is occurring, with some low-level TTS that may limit the detection of acoustic cues for relatively brief amounts of time in relatively confined footprints of activities;
- Effects on species that serve as prey for marine mammals from the activities are expected to be short-term and, therefore, any associated impacts on marine mammal feeding are not expected to result in significant or long-term consequences for individuals, or to accrue to adverse impacts on their populations;
- The ensonified areas are very small relative to the overall habitat ranges of all species and stocks, and would not adversely affect any areas of known biological importance;
- The lack of anticipated significant or long-term negative effects to marine mammal habitat; and,
- USACE will implement mitigation measures including visual monitoring, and shutdown zones to minimize the numbers of marine mammals exposed to injurious levels of sound.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the

implementation of the required monitoring and mitigation measures, NMFS finds that the total marine mammal take from the planned activity will have a negligible impact on all affected marine mammal species or stocks.

Small Numbers

As noted previously, only take of small numbers of marine mammals may be authorized under sections 101(a)(5)(A) and (D) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the number of individuals taken to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. When the predicted number of individuals to be taken is fewer than one-third of the species or stock abundance, the take is considered to be of small numbers. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

The amount of take NMFS authorized is below one-third of the estimated stock abundance for all species, except for Pribilof Island harbor seals (table 1).

The total number of takes authorized of harbor seal, if assumed to accrue solely to new individuals of the Pribilof Island stock, is >50 percent of the total stock abundance, which is currently estimated as 229. However, these numbers represent the estimated incidents of take, not the number of individuals taken. That is, it is expected that a relatively small subset of these harbor seal would be harassed by project activities, as harbor seal primarily occur to the west on the far side of St. George Island. (Williams, 2024, personal communication). Given that the specified activity will be stationary within an area not recognized as any special significance that would serve to attract or aggregate harbor seals we therefore believe that the estimated numbers of takes, were they to occur,

likely represent repeated exposures of a much smaller number of harbor seals and that these estimated incidents of take represent small numbers of harbor seal.

Based on the analysis contained herein of the planned activity (including the mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS finds that small numbers of marine mammals would be taken relative to the population size of the affected species or stocks.

Unmitigable Adverse Impact Analysis and Determination

In order to issue an IHA, NMFS must find that the specified activity will not have an “unmitigable adverse impact” on the subsistence uses of the affected marine mammal species or stocks by Alaskan Natives. NMFS has defined “unmitigable adverse impact” in 50 CFR 216.103 as an impact resulting from the specified activity: (1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by: (i) Causing the marine mammals to abandon or avoid hunting areas; (ii) Directly displacing subsistence users; or (iii) Placing physical barriers between the marine mammals and the subsistence hunters; and (2) That cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

Alaska Natives on St. George Island harvest subsistence resources, including northern fur seal, harbor seal, and Steller sea lion. Pribilovians on St. George Island may harvest up to a total of 500 male fur seals each year over the course of both the sub-adult harvest and the male young of the year harvest (50 CFR 216.72). On St. George Island, the open season for male sub-adult fur seal harvest runs from June 23 through August 8 annually, while the male young of the year fur seal open season spans from September 16 through November 30 annually. The most recent monitoring report available indicates that only 10 male sub-adult fur seal and 6 male young of the year fur seal were harvested in 2023 (Kashevarof, 2023a; Kashevarof, 2023b). There are no formal seasons for harbor

seals or Steller sea lion, but historically they are spring, winter, and fall (Williams, 2025, personal communication).

USACE contacted Mark Mercurief, the mayor St. George, Alaska, and described him as a subsistence hunter who personally knows every subsistence hunter in St. George community. Mayor Mercurief indicated that in recent years there have been no subsistence efforts for marine mammals during the planned project period.

The project is not likely to adversely impact the availability of any marine mammal species or stocks that are commonly used for subsistence purposes or impact subsistence harvest of marine mammals in the region because:

- Geotechnical surveys are planned to be conducted prior to the opening of subsistence hunting for northern fur seal and during a time when other pinnipeds have not been subsistence harvested in recent years;
- Geotechnical surveys are temporary and localized to between the Old Jetty and North Rookery;
- Mitigation measures will be implemented to avoid disturbance of Steller sea lion in the area and minimize disturbance of harbor seal and northern fur seal;
- The project is not expected to result in significant changes to availability of subsistence resources.

Based on the description of the specified activity, the measures described to minimize adverse effects on the availability of marine mammals for subsistence purposes, and the mitigation and monitoring measures, NMFS has determined that there will not be an unmitigable adverse impact on subsistence uses from USACE's activities.

Endangered Species Act

Section 7(a)(2) of the ESA of 1973 (16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in

the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS consults internally whenever we propose to authorize take for endangered or threatened species.

No incidental take of ESA-listed species is authorized or expected to result from this activity. Therefore, NMFS has determined that formal consultation under section 7 of the ESA is not required for this action.

National Environmental Policy Act

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216-6A, NMFS must review our proposed action (*i.e.*, the issuance of an IHA) with respect to potential impacts on the human environment.

This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NAO 216-6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has determined that the issuance of this IHA qualifies to be categorically excluded from further NEPA review.

Authorization

NMFS has issued an IHA to USACE for the potential harassment of small numbers of two marine mammal species incidental to the geotechnical survey activities in St. George, Alaska, that includes the previously explained mitigation, monitoring and reporting requirements.

Dated: April 10, 2025.

Kimberly Damon-Randall,

Director, Office of Protected Resources,

National Marine Fisheries Service.

[FR Doc. 2025-06376 Filed: 4/14/2025 8:45 am; Publication Date: 4/15/2025]