DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[Docket No. FWS-R7-ES-2025-0056; FXES111607MRG01–256–FF07CAMM00]

Marine Mammals; Incidental Take During Specified Activities; Proposed Incidental Harassment Authorization for Southcentral Alaska Stock of Northern Sea Otters at the Cruise Ship Passenger Dock and Terminal Facility in Seward, AK; Draft Environmental Assessment

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of receipt of application; proposed incidental harassment authorization; notice of availability of draft environmental assessment; request for comments.

SUMMARY: We, the U.S. Fish and Wildlife Service (FWS), in response to a request under the Marine Mammal Protection Act of 1972, as amended, from Turnagain Marine Construction (applicant), propose to authorize nonlethal, incidental take by harassment of small numbers of Southcentral Alaska stock northern sea otters (*Enhydra lutris kenyoni*) for a period of up to 1 year from the date of issuance. The applicant has requested this authorization for take by harassment that may result from activities associated with pile-driving and marine construction activities on the northern shore of Resurrection Bay in Seward, Alaska. We estimate that this project may result in, and propose to authorize, the nonlethal incidental take by harassment of up to 347 individual northern sea otters from the Southcentral Alaska stock. Neither the applicant nor the FWS anticipate any lethal take, and the FWS does not propose to authorize any lethal take. We invite comments on the proposed incidental harassment authorization and the accompanying draft environmental assessment from the public, and local, State, Tribal, and Federal agencies.

DATES: Comments must be received by [**INSERT DATE 30 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER***].

ADDRESSES: *Document availability:* You may view the application package, supporting information, the draft environmental assessment, and the list of references cited herein at https://www.regulations.gov under Docket No. FWS-R7-ES-2025-0056, or you may request these documents from the person listed under **FOR FURTHER INFORMATION CONTACT**.

Comment submission: You may submit comments on the proposed authorization by one of the following methods:

- *Electronic Submission:* Visit https://www.regulations.gov. In the Search box, enter FWS–R7–ES–2025–0056, which is the docket number for this notice. You may submit a comment by clicking on "Comment." Comments must be submitted to https://www.regulations.gov before 11:59 p.m. eastern time/7:59 p.m. Alaska time on the date specified in **DATES**.
- *U.S. mail:* Public Comments Processing, Attn: Docket No. FWS-R7-ES-2025-0056, U.S. Fish and Wildlife Service, MS: PRB (JAO/3W), 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send comments only by the methods described above. We will post all comments at https://www.regulations.gov. You may request that we withhold personal identifying information from public review; however, we cannot guarantee that we will be able to do so. See **Request for Public Comments** for more information.

FOR FURTHER INFORMATION CONTACT: Dr. Stephanie Burgess, by email at r7mmmregulatory@fws.gov, or by telephone at 1–800–362–5148 or 1–907–786–3800. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972 (MMPA; 16 U.S.C. 1361 et seq.) authorizes the Secretary of the Interior (Secretary) to allow, upon request, the incidental, but not intentional, taking by harassment of small numbers of marine mammals in response to requests by U.S. citizens (as defined in title 50 of the Code of Federal Regulations (CFR) in part 18, at 50 CFR 18.27(c)) engaged in a specified activity (other than commercial fishing) in a specified geographic region during a period of not more than 1 year. The Secretary has delegated authority for implementation of the MMPA to the U.S. Fish and Wildlife Service (FWS, or we). According to the MMPA, the FWS shall allow this incidental taking by harassment if we make findings that the total of such taking for the 1-year period:

1. Is of small numbers of marine mammals of a species or stock;

2. Will have a negligible impact on such species or stocks; and

3. Will not have an unmitigable adverse impact on the availability of these species or stocks for taking for subsistence use by Alaska Natives.

If the requisite findings are made, we issue an authorization that sets forth the following, where applicable:

1. Permissible methods of taking;

2. Means of effecting the least practicable adverse impact on the species or stock and its habitat and the availability of the species or stock for subsistence uses; and

3. Requirements for monitoring and reporting of such taking by harassment, including, in certain circumstances, requirements for the independent peer review of proposed monitoring plans or other research proposals.

The term “take” means to harass, hunt, capture, or kill, or to attempt to harass, hunt, capture, or kill any marine mammal. “Harassment” means any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (the MMPA defines this as “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 (the MMPA defines this as "Level B harassment").

The terms "negligible impact" and "unmitigable adverse impact" are defined in 50 CFR 18.27 (i.e., regulations governing small takes of marine mammals incidental to specified activities) as follows: "Negligible impact" is 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. "Unmitigable adverse impact" means 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.

The term "small numbers" is also defined in 50 CFR 18.27. However, we do not rely on that definition here as it conflates "small numbers" with "negligible impact." We recognize "small numbers" and "negligible impact" as two separate and distinct considerations when reviewing requests for incidental harassment authorizations (IHA) under the MMPA (see *Natural Res. Def. Council, Inc.* v. *Evans*, 232 F. Supp. 2d 1003, 1025 (N.D. Cal. 2003)). Instead, for our small numbers determination, we estimate the likely number of takes of marine mammals and evaluate if that take is small relative to the size of the species or stock.

The term "least practicable adverse impact" is not defined in the MMPA or its enacting regulations. For this IHA, we ensure the least practicable adverse impact by requiring mitigation measures that are effective in reducing the impact of project activities, but they are not so restrictive as to make project activities unduly burdensome or impossible to undertake and complete.

If the requisite findings are made, we shall issue an IHA, which may set forth the

following, where applicable: (i) permissible methods of taking; (ii) 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 subsistence uses by coastal-dwelling Alaska Natives (if applicable); and (iii) requirements for monitoring and reporting take by harassment.

Summary of Request

On November 8, 2024, Turnagain Marine Construction (hereafter, TMC or the applicant) submitted a request to the FWS for an authorization to take by Level A harassment and Level B harassment of northern sea otters (*Enhydra lutris kenyoni*) (hereafter, sea otters or otters unless another species is specified) from the Southcentral Alaska stock. The FWS sent a request for additional information on January 7, 2025. We received additional information on January 10, 2025, and requested further information on January 31, 2025. We received an updated version of the request on April 7, 2025, and determined the application to be adequate and complete. The applicant expects take by harassment may occur during the construction of their cruise ship berth and associated facilities on the northern shore of Resurrection Bay in Seward, Alaska.

Description of Specified Activities and Specified Geographic Region

The specified activity (hereafter project) will include the following: (1) removal of the existing passenger terminal building, passenger dock, and associated steel piles, (2) dredging and offshore disposal, and (3) installation of an ~92 by ~15 meter (m) (300 by 50 feet (ft)) pile-supported fixed dock, an ~31 m (100 ft) transition ramp, an ~238 m (780 ft) by ~31m (100 ft) floating dock structure supported by three float restraint dolphins, and two mooring dolphins in Seward, Alaska. Figure 1 shows the specified geographic region of the project. The applicant, TMC, plans to remove 1,830 existing steel piles, 1,820 of which will be ~36 centimeters (cm) (14 inches (in)) in diameter and 10 of which will be ~51 cm (20 in) in diameter. During the course of work, one hundred steel piles with a diameter of ~91 cm (36 in) will be installed to support construction and subsequently removed. The following piles will be permanently

installed: 76 steel piles of ~122 cm (48 in) diameter, 16 steel piles of ~152 cm (60 in) diameter, and 16 piles of ~183 cm (72 in) diameter. There will also be installation of dock components out of the water, including bull rails, fenders, mooring cleats, pre-cast concrete dock, a passenger walkway with handrail, and mast lights. Pile-driving activities will occur over 204 non-consecutive days during the 1 year from date of issuance of the IHA. The project may commence as soon as July, 2025, although the project schedule may be delayed to accommodate finalization of the IHA or for other reasons. If the IHA is issued after TMC's intended start date, the schedule for conducting the specified activities may be adjusted accordingly. Pile installation will be done with a combination of impact, vibratory, and down-the-hole (DTH) drilling. Temporary and existing piles will be removed by the dead-pull method (a direct lift of the pile using a crane) with or with the vibratory hammer. Materials and equipment will be transported via barges that will remain stationary most of the course of work. Skiffs may be used for short trips within frequently utilized navigation lanes as part of day-to-day operations near the docks. Mitigation measures will include soft-start procedures and hammer cushions where practicable, shutdown radii, pre-clearance of ensonification zones, use of bubble curtains for larger piles where bathymetry allows, and standoff distances between vessels and sea otters.

Additional project details may be reviewed in the application materials available as described under **ADDRESSES** or may also be requested as described under **FOR FURTHER INFORMATION CONTACT.**

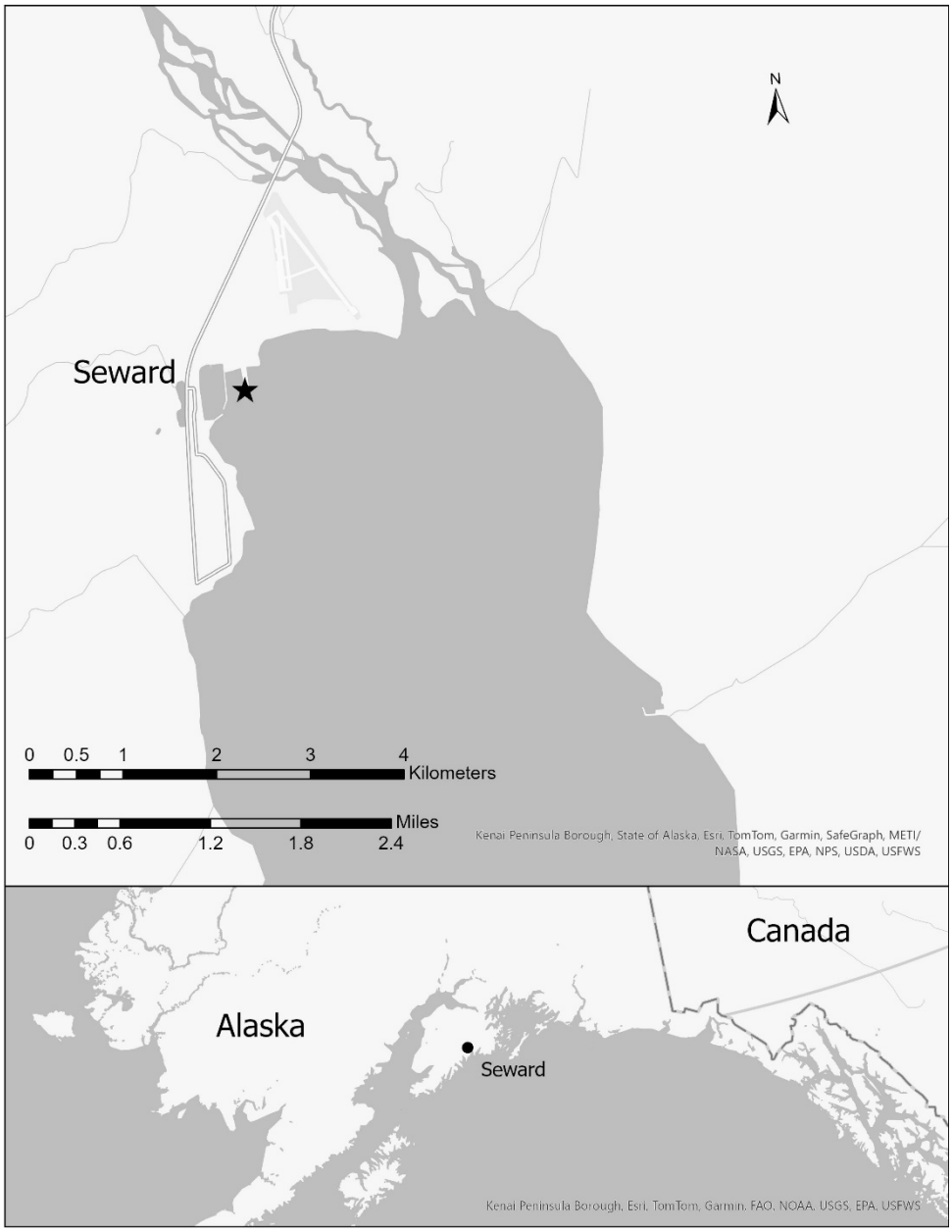

Figure 1. Specified geographic region of the project.

Description of Marine Mammals in the Specified Geographic Region

The northern sea otter is the only marine mammal under the FWS's jurisdiction that normally occupies the Northeast Pacific Ocean. Sea otters in Alaska are represented by three stocks: the Southwest Alaska stock, the Southcentral Alaska stock, and the Southeast Alaska stock. Northern sea otters in the waters surrounding Seward belong to the Southcentral Alaska stock. Detailed information about the biology of the Southcentral Alaska stock can be found in the most recent stock assessment report (88 FR 53510; August 8, 2023), available at https://www.fws.gov/project/marine-mammal-stock-assessment-reports.

Sea otters may be distributed anywhere within the specific geographic region other than upland areas; however, they generally occur in shallow water near the shoreline. They are most commonly observed within the 40-m (131-ft) depth contour (88 FR 53510; August 8, 2023), although they can be found in areas with deeper water. Ocean depth is generally correlated with distance to shore, and sea otters typically remain within 1 to 2 kilometers (km) (0.62 to 1.24 miles (mi)) of shore (Riedman and Estes 1990). They tend to be found closer to shore during storms, but they venture farther out during calm weather and sea state (Lensink 1962; Kenyon 1969).

The Southcentral Alaska sea otter stock occurs in the center of the sea otter range in Alaska and extends from Cape Yakataga in the east to Cook Inlet in the west, including Prince William Sound (PWS), the eastern Kenai Peninsula coast, and Kachemak Bay (88 FR 53510, August 8, 2023). Between 2014 and 2019, aerial surveys were conducted in three regions of the Southcentral Alaska sea otter stock: (1) Eastern Cook Inlet, (2) Outer Kenai Peninsula, and (3) PWS by aerial transects flown at 91 m (298.56 ft) of altitude. The combined estimates of the three regions resulted in approximately 21,617 (standard error = 2,190) sea otters and an average density of 1.96 sea otters per square kilometer (km^2) for the Southcentral Alaska stock (Esslinger et al. 2021; 88 FR 53510, August 8, 2023). The trend for the Southcentral Alaska sea otter stock has either increased or remained stable across surveyed areas since the previous FWS stock assessment report in 2014 (88 FR 53510, August 8, 2023). The maximum rate of productivity for the Southcentral stock is estimated at 29 percent (Eisaguirre et al. 2021; 88 FR 53510, August 8, 2023). The Southcentral Alaska sea otter stock is classified as non-strategic under the MMPA (88 FR 53510, August 8, 2023).

The most recent localized surveys that have been conducted near the project location are aerial surveys in PWS during the summer of 2014. These aerial surveys were flown using 400 m wide transects and have incorporated detection probability to best estimate sea otter abundance, resulting in a density of 2.31 sea otters/km^2 (Weitzman and Esslinger 2015). Distribution of the

sea otter population during the specified project is likely similar to that detected during sea otter surveys, as work will occur during the same time of the year that these surveys were conducted.

The documented home range sizes and movement patterns of sea otters illustrate the types of movements that could be seen among otters responding to the proposed activities. Sea otters are nonmigratory and generally do not disperse over long distances (Garshelis and Garshelis 1984). They usually remain within a few kilometers of their established feeding grounds (Kenyon 1981). Breeding males stay for all or part of the year in a breeding territory covering up to 1 km (0.62 mi) of coastline, while adult females have home ranges of approximately 8 to 16 km (5 to 10 mi), which may include one or more male territories. Juveniles move greater distances between resting and foraging areas (Lensink 1962; Kenyon 1969; Riedman and Estes 1990; Estes and Tinker 1996). Although sea otters generally remain local to a handful of focal areas, they are capable of long-distance travel. Otters in Alaska have shown daily movement distances greater than 3 km (1.9 mi) at speeds up to 5.5 km per hour (3.4 mi per hour) (Garshelis and Garshelis 1984). Additional information on range, stocks, and biology of sea otters can be found in the supplemental information (available as described above in **ADDRESSES**).

Potential Impacts of the Specified Activities on Marine Mammals

Effects of Noise on Sea Otters

We characterize "noise" as sound released into the environment from human activities that exceeds ambient levels or interferes with normal sound production or reception by sea otters. The terms "acoustic disturbance" and "acoustic harassment" are disturbances or harassment events resulting from noise exposure. Potential effects of noise exposure are likely to depend on the distance of the sea otter from the sound source, the level and intensity of sound the sea otter experiences, background noise levels, noise frequency, noise duration, and whether the noise is pulsed or continuous. The actual noise level perceived by individual sea otters will also depend on whether the sea otter is above or below water and atmospheric and environmental conditions.

Temporary disturbance of sea otters or localized displacement reactions are the most likely effects to occur from noise exposure.

Sea Otter Hearing

Pile-driving and marine construction activities produce sound that falls within the hearing range of sea otters. Controlled sound exposure trials on southern sea otters (*Enhydra lutris nereis*) indicate that sea otters can hear frequencies between 125 hertz (Hz) and 38 kilohertz (kHz), with best sensitivity between 1.2 and 27 kHz (Ghoul and Reichmuth 2014). Aerial and underwater audiograms for a captive adult male southern sea otter in the presence of ambient noise suggest the sea otter's hearing was less sensitive to high-frequency (greater than 22 kHz) and low-frequency (less than 2 kHz) sound than that of terrestrial mustelids but was similar to that of a California sea lion (*Zalophus californianus*). However, the sea otter was still able to hear low-frequency sounds, and the detection thresholds for sounds between 0.125 and 1 kHz were between 101 and 116 decibels (dB), respectively. Dominant frequencies of southern sea otter vocalizations are between 3 and 8 kHz, with some energy extending above 60 kHz (McShane et al. 1995; Ghoul and Reichmuth 2012).

Exposure to high levels of sound may cause changes in behavior, masking of communications, temporary or permanent changes in hearing sensitivity, discomfort, and injury to marine mammals. Unlike other marine mammals, sea otters do not rely on sound to orient themselves, locate prey, or communicate under water; therefore, masking of communications by anthropogenic sound is less of a concern than for other marine mammals. However, sea otters, especially mothers and pups, do use sound for communication in air (McShane et al. 1995) and sea otters may monitor underwater sound to avoid predators (Davis et al. 1987).

Exposure Thresholds

Underwater Sounds

Noise exposure criteria for identifying underwater noise levels capable of causing Level A harassment (which entails the potential for injury) to marine mammal species, including sea

otters, have been established using the same methods as those used by the National Marine Fisheries Service (NMFS) (Southall et al. 2019). These criteria are based on estimated levels of sound exposure capable of causing a permanent shift in hearing sensitivity (i.e., a permanent threshold shift (PTS) (NMFS 2018)). A PTS occurs when noise exposure causes hairs within the inner ear system to die (Ketten 2012). Although the effects of PTS are, by definition, permanent, PTS does not equate to total hearing loss.

Sound exposure thresholds incorporate two metrics of exposure: the peak level of instantaneous exposure likely to cause PTS and the cumulative sound exposure level (SEL_{CUM}) during a 24-hour period. They also include weighting adjustments for the sensitivity of different species to varying frequencies. The PTS-based injury criteria were developed from theoretical extrapolation of observations of temporary threshold shifts (TTS) detected in lab settings during sound exposure trials (Finneran 2015). The TTS is a noise-induced threshold shift in hearing sensitivity that fully recovers over time (Finneran 2015). Southall and colleagues (2019) predict that PTS for sea otters, which are included in the "other marine carnivores" category, will occur at 232 dB peak or 203 dB SEL_{CUM} for impulsive underwater sound and 219 dB SEL_{CUM} for nonimpulsive (continuous) underwater sound.

Thresholds based on TTS have been used as a proxy for Level B harassment (i.e., 70 FR 1871, January 11, 2005; 71 FR 3260, January 20, 2006; 73 FR 41318, July 18, 2008). Southall et al. (2007) derived TTS thresholds for pinnipeds based on 212 dB peak and 171 dB SEL. Exposures resulting in TTS in pinnipeds were found to range from 152 to 174 dB (183 to 206 dB SEL) (Kastak et al. 2005), with a persistent TTS, if not a PTS, after 60 seconds of 184 dB SEL (Kastak et al. 2008). Kastelein et al. (2012) found small but statistically significant TTSs at approximately 170 dB SEL_{CUM} (136 dB, 60 minutes) and 178 dB SEL_{CUM} (148 dB, 15 minutes). Based on these findings, Southall et al. (2019) developed TTS thresholds for sea otters, which are included in the "other marine carnivores" category, of 188 dB SEL for impulsive sounds and 199 dB SEL for nonimpulsive sounds. The NMFS (2024*a*) has recently updated their

Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing utilizing the work of Southall et al. (2019), but they have retained the 160-dB threshold for Level B harassment from exposure to impulsive noise and a 120-dB threshold for continuous noise (NMFS 2024*b*). The FWS is evaluating the new auditory injury criteria from NMFS to determine whether they are appropriate for FWS trust species. Pending the outcome of those evaluations, the FWS will continue to use the previous version of the technical guidance (NMFS 2018) in our estimates of potential harassment via underwater sound.

The NMFS (2018) criteria do not identify thresholds for avoidance of Level B harassment. For pinnipeds (seals and sea lions), the NMFS has adopted a 160-dB threshold for Level B harassment from exposure to impulsive noise and a 120-dB threshold for continuous noise (NMFS 1998; HESS 1999; NMFS 2018). These thresholds were developed from observations of mysticete (baleen) whales responding to airgun operations (e.g., Malme et al. 1983; Malme and Miles 1983; Richardson et al. 1986, 1995) and from equating Level B harassment with noise levels capable of causing TTS in lab settings. Southall et al. (2007, 2019) assessed behavioral response studies and found considerable variability among pinnipeds. The authors determined that exposures between approximately 90 and 140 dB generally do not appear to induce strong behavioral responses from pinnipeds in water. However, they found behavioral effects, including avoidance, become more likely in the range between 120 and 160 dB, and most marine mammals showed some, albeit variable, responses to sound between 140 and 180 dB. Wood et al. (2012) adapted the approach identified in Southall et al. (2007) to develop a probabilistic scale for marine mammal taxa at which 10 percent, 50 percent, and 90 percent of individuals exposed are assumed to produce a behavioral response. For many marine mammals, including pinnipeds, these response rates were set at sound pressure levels (SPL) of 140, 160, and 180 dB, respectively.

We have evaluated these thresholds and determined that the Level B harassment threshold of 120 dB for nonimpulsive noise is not applicable to sea otters. The 120-dB threshold

is based on studies in which gray whales (*Eschrichtius robustus*) were exposed to experimental playbacks of industrial noise (Malme et al. 1983; Malme and Miles 1983). During these playback studies, southern sea otter responses to industrial noise were also monitored (Riedman 1983, 1984). Gray whales exhibited avoidance to industrial noise at the 120-dB threshold; however, there was no evidence of disturbance reactions or avoidance in southern sea otters. Thus, given the different range of frequencies to which sea otters and gray whales are sensitive, the NMFS 120-dB threshold based on gray whale behavior is not appropriate for predicting sea otter behavioral responses, particularly for low-frequency sound.

Based on the lack of sea otter disturbance response or any other reaction to the playback studies from the 1980s, as well as the absence of a clear pattern of disturbance or avoidance behaviors attributable to underwater sound levels up to about 160 dB resulting from low-frequency broadband noise, we assume 120 dB is not an appropriate behavioral response threshold for sea otters exposed to continuous underwater noise.

Based on the best available scientific information about sea otters and closely related marine mammals when sea otter data are limited, the FWS has set 160 dB of received underwater sound as a threshold for Level B take by disturbance for sea otters for this IHA. Exposure to in-water noise levels between 125 Hz and 38 kHz that are greater than 160 dB—for both impulsive and nonimpulsive sound sources—will be considered by the FWS as Level B harassment. Thresholds for Level A harassment (which entails the potential for injury) for in-water sounds between 125 Hz and 38 kHz will be 232 dB peak or 203 dB SEL for impulsive sounds and 219 dB SEL for continuous sounds (table 1).

Table 1—Temporary Threshold Shift (TTS) and Permanent Threshold Shift (PTS) Thresholds established by Southall et al. (2019) through modeling and extrapolation for "Other Marine Carnivores," which include sea otters.*

	TTS			PTS		
	nonimpulsive	impulsive		nonimpulsive	impulsive	
	SEL_{CUM}	SEL_{CUM}	Peak SPL	SEL_{CUM}	SEL_{CUM}	Peak SPL
Air	157	146	170	177	161	176

Water	199	188	226	219	203	232

* Values are weighted for other marine carnivores' hearing thresholds and given in cumulative sound exposure level (SEL_{CUM} dB re 20 micropascal (µPa) in air and SEL_{CUM} dB re 1 µPa in water) for impulsive and nonimpulsive sounds, and unweighted peak sound pressure level (SPL) in air (dB re 20µPa) and water (dB 1µPa) (impulsive sounds only).

Airborne Sounds

The NMFS (2018) guidance neither addresses thresholds for preventing injury or disturbance from airborne noise, nor provides thresholds for avoidance of Level B harassment. Conveyance of underwater noise into the air is of little concern since the effects of pressure release and interference at the water's surface reduce underwater noise transmission into the air. For activities that create both in-air and underwater sounds, we will estimate take based on parameters for underwater noise transmission. Considering sound energy travels more efficiently through water than through air, this estimation will also account for exposures to sea otters at the surface.

Evidence from Sea Otter Studies

Individual sea otters in Resurrection Bay will likely show a range of responses to noise from pile-driving activities. Some sea otters will likely dive, show startle responses, change direction of travel, or prematurely surface. Sea otters reacting to pile-driving activities may divert time and attention from biologically important behaviors, such as feeding and nursing pups. Sea otter responses to disturbance can result in energetic costs, which increases the amount of prey required by sea otters (Barrett 2019). This increased prey consumption may impact sea otter prey availability and cause sea otters to spend more time foraging and less time resting (Barrett 2019). Some sea otters may abandon the project area and return when the disturbance has ceased. Based on the observed movement patterns of sea otters (Lensink 1962; Kenyon 1969, 1981; Garshelis and Garshelis 1984; Riedman and Estes 1990; Tinker and Estes 1996), we expect some individuals will respond to pile-driving activities by dispersing to nearby areas of suitable habitat; however other sea otters, especially territorial adult males, will not be displaced.

Additional information on the evidence from studies about how sea otters may be

affected by sound can be found in the supplemental information to this document (available as described above in **ADDRESSES**).

Consequences of Disturbance

Information on the consequences of disturbance to sea otters can be found in the supplemental information to this document (available as described above in **ADDRESSES**).

Vessel Activities

Vessel activity during the project includes the transit of barges for materials and construction, all of which will remain on site, mostly stationary, to support the work; additionally, a skiff will be used for short trips within the project area. Vessels will not be used extensively during the planned work; therefore, we do not anticipate that sea otters will experience changes in behavior indicative of tolerance or habituation.

Additional information on vessel activities can be found in the supplemental information to this document (available as described above in **ADDRESSES**).

Effects on Sea Otter Habitat and Prey

Information on the potential impacts of the specified activities on sea otter prey species can be found in the supplemental information to this document (available as described above in **ADDRESSES**). Based on this information, we do not anticipate any harassment to sea otters stemming from effects to sea otter habitat or prey.

Potential Impacts of the Specified Activities on Subsistence Uses

The planned specified activities will occur in areas rarely used for subsistence harvesting activity. No subsistence harvest of sea otters was documented in Seward from 2013 through 2022, and only two sea otters were harvested in 2023.

The planned project would occur within the city limits of Seward, where firearm use is prohibited. The area potentially affected by the planned project does not significantly overlap with current subsistence harvest areas. Construction activities will not preclude access to hunting areas or interfere in any way with individuals wishing to hunt. Despite no conflict with

subsistence use being anticipated, the FWS will conduct outreach with potentially affected communities to gather any questions, concerns, or potential conflicts regarding subsistence use in those areas. If any conflicts are identified in the future, TMC will develop a plan of cooperation specifying the steps necessary to minimize any effects the project may have on subsistence harvest.

Estimated Take

Definitions of Incidental Take under the Marine Mammal Protection Act

Below we provide the circumstances under which three types of take of northern sea otters may occur. The FWS does not anticipate and is not proposing to authorize lethal take as a part of this proposed IHA, nor did the applicant request authorization of lethal take; however, all take types are discussed for context and background.

Lethal Take—Human activity may result in biologically significant impacts to northern sea otters. In the most serious interactions, human actions can result in the mortality of sea otters.

Level A Harassment—Human activity may result in injury to sea otters. Level A harassment for nonmilitary readiness activities is defined as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild.

Level B Harassment—Level B harassment for nonmilitary readiness activities means any act of pursuit, torment, or annoyance that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behaviors or activities, including, but not limited to, migration, breathing, nursing, feeding, or sheltering. Human-caused changes in behavior that disrupt biologically significant behaviors or activities for the affected animal indicate take by Level B harassment under the MMPA.

The FWS has identified the following sea otter behaviors as indicative of possible Level B harassment:

- Swimming away at a fast pace on belly (i.e., porpoising);
- Repeatedly raising the head vertically above the water to get a better view

(spyhopping) while apparently agitated or while swimming away;

- In the case of a pup, repeatedly spyhopping while hiding behind and holding onto its mother's head;
- Abandoning prey or feeding area;
- Ceasing to nurse and/or rest (applies to dependent pups);
- Ceasing to rest (applies to independent animals);
- Ceasing to use movement corridors;
- Ceasing mating behaviors;
- Shifting/jostling/agitation in a raft so that the raft disperses;
- Sudden diving of an entire raft; or
- Flushing animals off a haulout.

This list is not meant to encompass all possible behaviors; other behavioral responses may also be indicative of Level B harassment. Relatively minor changes in behavior such as increased vigilance or a short-term change in direction of travel are not likely to disrupt biologically important behavioral patterns, and the FWS does not view such minor changes in behavior as indicative of Level B harassment.

Calculating Take

The FWS does not anticipate the Level A or Level B harassment of sea otters resulting from vessel operations, dredging, or placement of dredged material in the waterway. Vessels will be operated in areas with year-round boat traffic at conservatively slow speeds, significantly reducing the probability of sea otter harassment. Dredging and deposition of material is not anticipated to generate appreciable underwater noise (ERDC 2001, Dickerson et al. 2001, Nedwell and Howell 2004). Finally, otters are not anticipated to be physically injured due to dredging or deposition due to the use of protected species observers and shutdown zones.

We assumed all animals exposed to underwater sound levels that meet the acoustic exposure criteria defined above in *Exposure Thresholds* will experience take by Level A

harassment or Level B harassment due to exposure to underwater noise. Spatially explicit zones of ensonification were established around the planned construction location to estimate the number of otters that may be exposed to these sound levels. We determined the number of otters present in the ensonification zones using density information generated by Weitzman and Esslinger (2015).

The project can be divided into three major components: DTH drilling, vibratory drilling, and pile driving using an impact driver. Each of these components will generate a different type of in-water noise. Vibratory drilling and pile removal will produce nonimpulsive or continuous noise; impact driving will produce impulsive noise; and DTH drilling is considered to produce both impulsive and continuous noise (NMFS 2020).

The level of sound anticipated from each project component was established using recorded data from several sources listed in table 2. We used the empirical data from those proxy projects with the NMFS Technical Guidance and User Spreadsheet (NMFS 2018, 2020) to determine the distance at which sound levels would attenuate to Level A harassment thresholds (table 1). For the 60-in and 72-in piles, the applicant presented two operational scenarios: 1) the maximum number of piles driven per day, and 2) the likely number of piles driven per day. To calculate ensonification areas, we used the scenario with the maximum possible piles driven per day to account for the longest potential duration of sound production within a 24-hour period. The weighting factor adjustment included in the NMFS user spreadsheet accounts for sounds created in portions of an organism's hearing range where they have less sensitivity. We used the weighting factor adjustment for otariid pinnipeds as they are the closest available physiological and anatomical proxy for sea otters.

Table 2—Summary by project component of sound level, reference for sound information, timing of sound production, and maximum number of piles per day for installation and removal of piles at the project area in Seward, Alaska.

Activity	Proxy sound source level at 10m (dB)			Reference	Minutes per pile	Total number of piles	Maximum number of piles per day
	Peak	SEL	RMS				
Vibratory Pile Driving or Removal							

14-inch H pile removal	-	-	160	PR1 2023 Calculations; Anacortes, WA (Sexton 2007)	5	1,820	40
20-inch steel pile removal	-	-	163	Naval Base Kitsap Bangor Test Pile (U.S. Navy, 2012) and EHW-2 (U.S. Navy, 2013)	10	10	4
36-inch steel pile installation	-	-	166	PR1 2023 Calculations; Naval Base Kitsap Bangor Test Pile (U.S. Navy (2012)) and EHW-2 (U.S. Navy (2013)), Anacortes (Sexton, 2007), Edmonds Ferry Terminal (Laughlin 2011, 2017), Gustavus (Miner, 2020)	10	100	6
36-inch steel pile removal	-	-	166		10	100	6
48-inch steel pile installation	-	-	176 (171)	PR1 2023 Calculations; Naval Base Kitsap Bangor Test Pile (U.S. Navy, 2012) and EHW-2 (U.S. Navy, 2013)	10	76	6
60-inch steel pile installation	-	-	176 (171)		15	16	4
72-inch steel pile installation	-	-	176 (171)		20	16	4
Impact Pile Driving							
48-inch steel pile installation	213 (208)	179 (174)	192 (187)	Caltrans 2020; Alameda Bay, CA	120	64	4
60-inch steel pile installation	210 (205)	185 (180)	195 (190)	Caltrans 2020; Richmond San Rafael Bridge, CA	120	16	3
72-inch steel pile installation	210 (205)	185 (180)	195 (190)		120	16	3
DTH Drilling							
36-inch steel pile installation	174	164		Denes et al. 2019; NMFS 2022 "Acoustic Guidance for Assessment of Down-the-hole Systems" 25" to 42" pile hole/diameters (Reyff and Heyvaert 2019; Reyff 2020)	120	24	4
48-inch steel pile installation	178 (173)	168 (163)	-	NMFS 2024	150	12	4
60-inch steel pile installation	174 (169)	181 (176)	-	U.S. Navy Construction at Portsmouth Naval Shipyard, Kittery, Maine (NOAA 2023)	240	8	2
72-inch steel pile installation	174 (169)	181 (176)	-		360	5	2

NOTE: Sound levels for all sources are unweighted and given in dB re 1 µPa. Nonimpulsive sounds are in the form of mean maximum root mean square (RMS) sound pressure level (SPL) as it is more conservative than cumulative sound exposure level (SEL) or peak SPL for these activities. Values in parenthesis indicate sound level reduced by 5 dB re 1 µPa through use of a bubble curtain.

The spreadsheet also incorporates a transmission loss coefficient, which accounts for the reduction in sound level outward from a sound source. We used the NMFS-recommended transmission loss coefficient of 15 for coastal pile-driving activities to indicate practical spread (NMFS 2020).

To calculate the area ensonified for each type of pile-driving activity, the coordinates of the piles were mapped in ArcGIS Pro. We used a representative pile of each size around which to map the Level A harassment and Level B harassment zones. We chose representative piles that

were farthest from shore to estimate in-water areas based on maximum watering during tidal cycles. Where radii are small enough that their defined circles will fall entirely in the water, the area was calculated as πr^2. For larger radii, we used ArcGIS Pro to map and calculate the area of the water ensonified by those activities.

To determine the number of sea otters that may experience in-water sounds capable of causing either Level A or B harassment, we multiplied the area ensonified to the corresponding sound threshold by the density of animals. We used a density of 2.31 sea otters per square kilometer (km^2) derived from surveys conducted in PWS, Alaska (Weitzman and Esslinger 2015). The number of sea otters expected to be exposed to such sound levels can be found in tables 3 and 4. We calculated the harassment zones for DTH drilling with input from NMFS. The sound pressure levels produced by DTH drilling were provided by NMFS in 2024 via correspondence with Solstice Alaska Consulting, who created the application for this IHA on behalf of TMC. We then used the NMFS Technical Guidance and User Spreadsheet (NMFS 2018, 2020) to determine the distance at which these sounds would attenuate to Level A harassment thresholds. To estimate the distances at which sounds could potentially cause Level B harassment, we again used the NMFS-recommended transmission loss coefficient of 15 for coastal pile-driving activities in a practical spreading loss model (NMFS 2020) to determine the distance at which sound levels attenuate to 160 dB re 1 µPa. However, due to the differences in how PTS and TTS thresholds are calculated, as well as limited data of underwater sound pressure levels from DTH drilling, the resultant Level A isopleths are larger than the Level B isopleths.

Table 3—Summary by project component of distance from sound source to below Level A harassment thresholds, days of impact, sea otters in Level A harassment ensonification area, and total number of Level A harassment events expected by pile installation and removal of piles at the project area in Seward, Alaska.

Activity	Distance to below Level A harassment threshold (m)	Ensonified area (km^2)	Potential sea otters exposed per day (calculated)	Potential sea otters exposed per day (rounded)	Maximum number of days of activity	Total potential Level A harassment events
Vibratory Pile Driving or Removal						
14-inch H pile removal	0.6	1.13*10e-6	2.61*10e-6	0	46	0
20-inch steel pile removal	0.3	2.83*10e-7	6.53*10e-7	0	3	0

36-inch steel pile installation	0.6	1.13*10e-6	2.61*10e-6	0	17	0
36-inch steel pile removal	0.6	1.13*10e-6	2.61*10e-6	0	17	0
48-inch steel pile installation, no bubble curtain	1.4	6.16*10e-6	1.42*10e-5	0	11	0
48-inch steel pile installation, with bubble curtain[1]	0.6	1.13*10e-6	2.61*10e-6	0	2	0
60-inch steel pile installation[1]	0.6	1.13*10e-6	2.61*10e-6	0	16	0
72-inch steel pile installation[1]	0.8	2.01*10e-6	4.64*10e-06	0	16	0
Impact Pile Driving						
48-inch steel pile installation, no bubble curtain	110.4	0.03829	0.08845	2	16	32
48-inch steel pile installation, with bubble curtain[1]	51.2	0.00824	0.01902	2	3	6
60-inch steel pile installation[1]	106.2	0.03543	0.08184	2	16	32
72-inch steel pile installation[1]	106.2	0.03543	0.08184	2	16	32
DTH Drilling						
36-inch steel pile installation	123.0	0.04753	0.10979	2	6	12
48-inch steel pile installation, no bubble curtain	240.5	0.18171	0.41975	2	5	10
48-inch steel pile installation, with bubble curtain[1]	111.6	0.26348	0.09038	2	1	2
60-inch steel pile installation[1]	579.4	1.05464	2.04417	3	8	24
72-inch steel pile installation[1]	759.3	1.81124	3.12362	4	5	20
Total number of Level A harassment events						**170**

[1] Indicates that sound source levels have been reduced by 5 dB re 1µPa to reflect use of a bubble curtain.

Table 4—Summary by project component of distance from sound source to below Level B harassment thresholds, days of impact, sea otters in Level B harassment ensonification area, and total number of Level B harassment events expected by pile installation and removal of piles at the project area in Seward, Alaska.

Activity	**Distance to below Level B harassment threshold (m)**	**Ensonified area (km^2)**	**Potential sea otters exposed per day (calculated)**	**Potential sea otters exposed per day (rounded)**	**Maximum number of days of activity**	**Total potential Level B harassment events**
Vibratory Pile Driving or Removal						
14-inch H pile removal	10.00	0.000314	0.00072	0	46	0
20-inch steel pile removal	15.85	0.0007	0.00182	2	3	6
36-inch steel pile installation	25.12	0.00198	0.00458	2	17	34
36-inch steel pile removal	25.12	0.00198	0.00458	2	17	34
48-inch steel pile installation, no bubble curtain	54.12	0.00920	0.02124	2	11	22
48-inch steel pile installation, with bubble curtain[1]	25.12	0.00198	0.00458	2	2	4

60-inch steel pile installation[1]	25.12	0.00198	0.00458	2	16	32
72-inch steel pile installation[1]	25.12	0.00198	0.00458	2	16	32
Impact Pile Driving						
48-inch steel pile installation, no bubble curtain	1360	3.18066	7.25886	8	16	128
48-inch steel pile installation, with bubble curtain[1]	631	1.25069	2.87007	3	3	9
60-inch steel pile installation[1]	1000	2.01509	4.57301	5	16	80
72-inch steel pile installation[1]	1000	2.01509	4.57301	5	16	80
DTH Drilling[2]						
36-inch steel pile installation	85.78	-	-	-	-	-
48-inch steel pile installation, no bubble curtain	158.5	-	-	-	-	-
48-inch steel pile installation, with bubble curtain[1]	73.56	-	-	-	-	-
60-inch steel pile installation[1]	39.81	-	-	-	-	-
72-inch steel pile installation[1]	39.81	-	-	-	-	-
Total number of Level B harassment events						**461**

[1] Indicates that sound source levels have been reduced by 5 dB re 1µPa to reflect use of a bubble curtain.
[2] Radii for sound isopleths for Level B harassment are presented for reference. Level A radii exceed Level B radii and therefore no level B harassment is expected beyond what is calculated for Level A harassment, see Table 2, above.

We assumed that the different types of pile-driving activities would occur sequentially and that the total number of days of work would equal the sum of the number of days required to complete each type of pile-driving activity. While it is possible that on some days more than one type of activity will take place, which would reduce the number of days of exposure within a year, we cannot know this information in advance. As we discussed above, the applicant presented two operational scenarios with maximum and likely number of piles driven per day for their ~152-cm (60-in) and ~183-cm (72-in) piles. When estimating the number of project days, we used the scenario with the minimum possible numbers of piles driven per day to account for the highest possible number of days on which pile driving could occur. As such, the estimated number of days and, therefore, exposures per year is the maximum possible for the planned work. Where the number of exposures expected per day was zero to three or more decimal places (i.e., <0.00X), the number of exposures per day was assumed to be zero.

To minimize exposure of sea otters to sounds above Level A harassment thresholds, TMC will implement 10 m (~33 ft) shutdown zones, where operations will cease should a sea otter enter or approach the specified zone. Soft-start and zone clearance prior to startup will also limit the exposure of sea otters to sound levels that could cause PTS. However, the size and shape of the structure may impede the field of vision of PSOs, and so we assumed that some otters may be exposed to sounds capable of causing Level A harassment.

Although sea otters are non-migratory, they typically move amongst focal areas within their home ranges to rest and forage (Garshelis and Garshelis 1984; Laidre et al. 2009). The project area is located at the north, and furthest inland, end of Resurrection Bay, which has a length of just under 30 km (~18.6 mi) and an area of roughly 150 km^2 (~58 mi^2). It is possible that, given the large variability in individual home range sizes and the potential for daily movement in and out of foraging or resting areas, different individual sea otters could be found within the ensonification zone on different work days. The width and length of Resurrection Bay make it unlikely that there would be 100% daily turnover of individual animals at the project area. Similarly, if sea otters from nearby coastline were to enter Resurrection Bay to seek calmer waters during rough weather, we would not expect those animals to travel far enough inshore to reach the areas ensonified by pile driving and removal. To find the maximum number of individual sea otters that might be affected by project activities, we multiplied the area of Resurrection Bay by the expected density of sea otters. This resulted in ~347 animals (150 km^2 multiplied by 2.31 sea otters per km^2 = 346.5). Thus, the FWS conservatively assumes that the 631 estimated harassment events may impact up to 347 different sea otters.

Critical Assumptions

We estimate that takes by Level B and Level A harassment of up to 347 sea otters may occur due to TMC's planned cruise ship dock construction activities. To conduct this analysis and estimate the potential amount of take by harassment, several critical assumptions were made.

In estimating anticipated Level B harassment, we recognize that there is likely a portion

of animals that will respond in ways that indicate some temporary and minor level of disturbance but do not constitute a disruption of behavioral patterns.

We used the sea otter density for the Seward area from surveys and analyses conducted by Weitzman and Esslinger et al. (2015). Methods and assumptions for these surveys can be found in the original publication.

We used sound source verification from recent pile-driving activities in several locations within and beyond Alaska to generate sound level estimates for construction activities. Environmental conditions in these locations, including water depth, substrate, and ambient sound levels, are similar to those in the project location, but not identical. Further, estimation of ensonification zones were based on sound attenuation models using a practical spreading loss model. These factors may lead to actual sound values differing slightly from those estimated here.

We assume that all piles will be installed and removed while submerged in water. Some of the piles may be located in the intertidal zone. Work performed at lower tidal heights would likely result in decreased transmission of sounds to the water column. Here, the operator will conduct work at lower tidal heights to the maximum extent practicable. However, as the timing of pile installation and removal was not known in advance, we accounted for the possibility that all work may occur at a tidal height that allows for full sound transmission. This ensures that our estimate of the number of sea otters potentially exposed to sound reflects the most impactful operational scenarios.

Finally, the pile-driving activities described here will also create in-air noise. Because sea otters spend on average over half of their day with their heads above water (Esslinger et al. 2014), they will be exposed to an increase in-air noise from construction equipment. However, we have calculated Level B harassment with the assumption that an individual may be harassed only one time per 24-hour period, and underwater sound levels will be more disturbing and extend farther than in-air noise. Thus, while sea otters may be disturbed by noise both in-air and

underwater, we have relied on the more conservative underwater estimates.

Sum of Harassment from All Sources

The applicant plans to conduct pile-driving and marine construction activities in Seward Alaska, over the course of a year from the date of issuance of the IHA. Over the course of the project, we estimate 461 instances of take by Level B harassment of northern sea otters from the Southcentral Alaska stock due to behavioral responses and/or TTS associated with noise exposure. Although multiple instances of harassment of individual sea otters are possible, we do not anticipate that repeated harassment would affect individual sea otters in manners not considered above.

The use of soft-start procedures, zone clearance prior to startup, and shutdown zones is likely to decrease both the number of sea otters exposed to sounds above Level A harassment thresholds and the exposure time of any sea otters venturing into a Level A harassment zone. This reduces the likelihood of hearing sensitivity losses that might impact the health, reproduction, or survival of affected animals. Despite the implementation of mitigation measures, it is anticipated that some sea otters will experience Level A harassment via exposure to underwater sounds above threshold criteria during impact and DTH pile-driving activities. Due to sea otters' small body size and low profile in the water, as well as the relatively large size of the Level A harassment zone associated with these activities, we anticipate that sea otters will at times avoid detection before entering Level A harassment zones for those activities. Throughout the project, we estimate 170 instances of take by Level A harassment of sea otters.

Determinations and Findings

Sea otters exposed to sound from the specified activities are likely to respond with temporary behavioral modification or displacement. The specified activities could temporarily interrupt the feeding, resting, and movement of sea otters. Because activities will occur during a limited amount of time and in a localized region, the impacts associated with the project are likewise temporary and localized. The anticipated effects are short-term behavioral reactions and

displacement of sea otters near active operations.

Sea otters that encounter the specified activity may exert more energy than they would otherwise, due to temporary cessation of feeding, increased vigilance, and retreating from the project area. We expect that affected sea otters will tolerate this exertion without measurable effects on health or reproduction. Most of the anticipated takes will be due to short-term Level B harassment in the form of TTS, startling reactions, or temporary displacement. While mitigation measures incorporated into TMC's request will reduce occurrences of Level A harassment to the extent practicable, a small number of take by Level A harassment are anticipated for impact and DTH pile-driving activities, which have Level A harassment zone radii ranging in size from 51.1 to 759.3 m (~168 to ~2,491 ft). The brevity of exposure of sea otters to sounds at such levels will limit the degree of hearing loss that may result from PTS experienced by these animals. We do not anticipate that this type of hearing injury would result in effects beyond what are considered above.

With the adoption of the mitigation measures incorporated in TMC's request and subsequently required by this proposed IHA, anticipated take was reduced.

Small Numbers

To assess whether the authorized incidental taking would be limited to "small numbers" of marine mammals, the FWS uses a proportional approach that considers whether the estimated number of marine mammals to be subjected to incidental take is small relative to the population size of the species or stock. Here, predicted levels of take were determined based on the estimated density of sea otters in the project area and ensonification zones developed using empirical evidence from similar geographic areas.

We estimate that TMC's specified activities in the specified geographic region will take no more than 347 sea otters during the 1-year period of this proposed IHA (see *Sum of Harassment from All Sources*). Take of 347 animals is 1.61 percent of the best available estimate of the current Southcentral Alaska stock size of 21,617 animals (Esslinger et al. 2021)

((347÷21,617)×100≈1.61). We propose a finding that the specified activities would take only a "small number" of sea otters of the Southcentral Alaska stock.

Negligible Impact

We propose a finding that any incidental take by harassment resulting from the specified activities cannot be reasonably expected to, and is not reasonably likely to, adversely affect sea otters through effects on annual rates of recruitment or survival and will, therefore, have no more than a negligible impact on the Southcentral Alaska stock of northern sea otters. In making this finding, we considered the best available scientific information, including the biological and behavioral characteristics of the species; the most recent information on species distribution and abundance within the area of the specified activities; the current and expected future status of the stock (including existing and foreseeable human and natural stressors); the potential sources of disturbance caused by the project; and the potential responses of marine mammals to this disturbance. In addition, we reviewed applicant-provided materials, information from our files and datasets, published reference materials, and species experts.

Sea otters are likely to respond to planned activities with temporary behavioral modification or temporary displacement. These reactions are not anticipated to have consequences for the long-term health, reproduction, or survival of affected animals. Most animals will respond to disturbance by moving away from the source, which may cause temporary interruption of foraging, resting, or other natural behaviors. Affected animals are expected to resume normal behaviors soon after exposure with no lasting consequences. Some animals may exhibit some of the stronger responses typical of Level B harassment, such as fleeing, interruption of feeding, or flushing from a haulout. These responses could have temporary biological impacts for affected individuals but are not anticipated to extend over a period of time sufficiently long so as to result in effects not considered in our analyses.

Sea otters may move in and out of the project area during pile driving activities, leading to as many as 347 individuals experiencing one day of exposure. However, it is possible that an

individual may enter ensonification areas more than once during the project. At most, if an individual sea otter enters an ensonification area every day that pile driving occurs, the sea otter would be exposed to pile driving and marine construction noise for up to 204 days. However, the areas that will experience noise greater than Level A or Level B thresholds due to pile driving are small (a maximum of just over 2 km^2), and on the majority of work days these areas will be below 0.1 km^2. This limits the number of days on which an individual animal might be exposed over the duration of the project. Further, sea otters spend over half of their time above the surface during the summer months (Esslinger et al. 2014), and likely no more than 70 percent of their time foraging during winter months (Gelatt et al. 2002). Thus, the sea otters' ears will not be exposed to continuous noise; therefore, the amount of time it may take for permanent hearing loss to occur is considerably longer than for mammals whose heads remain primarily under water.

The total number of animals affected, and severity of impact are not sufficient to change the current population dynamics at the stock scale. Although the specified activities may result in approximately 631 incidental takes of up to 347 sea otters from the Southcentral Alaska stock, we do not expect this level of harassment to affect annual rates of recruitment or survival or result in adverse effects on the stock.

Our proposed finding of negligible impact applies to incidental take associated with the specified activities as mitigated by the avoidance and minimization measures identified in TMC's mitigation and monitoring plan. These mitigation measures are designed to minimize interactions with and impacts to sea otters. These measures, as well as monitoring and reporting procedures, are a necessary component of the proposed IHA and required for valid findings. For these reasons, we propose a finding that the specified project will have a negligible impact on the Southcentral Alaska stock of northern sea otters.

Impact on Subsistence Use

The project will not preclude access to harvest areas or interfere with the availability of

sea otters for harvest. Additionally, the planned activities are located within the City of Seward, Alaska, where firearm use is prohibited. We therefore propose a finding that TMC's anticipated harassment will not have an unmitigable adverse impact on the availability of any stock of northern sea otters for taking for subsistence uses. In making this proposed finding, we considered the timing and location of the planned activities and the timing and location of subsistence harvest activities in the project area.

Least Practicable Adverse Impact

We propose to find that the mitigation measures required by this proposed IHA will effect the least practicable adverse impact on the sea otter stocks from any incidental take likely to occur in association with the specified activities. In making this finding, we considered the biological characteristics of sea otters, the nature of the specified activities, the potential effects of the activities on sea otters, the documented impacts of similar activities on sea otters, and alternative mitigation measures.

In evaluating what mitigation measures are appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses, we considered the effectiveness of these measures once successfully implemented. We considered the nature of the potential adverse impact being mitigated (likelihood, scope, range); the likelihood that the measures will be effective if implemented; and the likelihood of effective implementation. We also considered the practicability of the measures for applicant implementation (e.g., cost, impact on operations). We assessed whether any additional, practicable requirements could be implemented to further reduce effects, but did not identify any.

TMC incorporated the following mitigation measures into its request:

- Using the smallest diameter piles practicable while minimizing the overall number of piles;
- Using a project design that does not include blasting;

- Using a hammer cushion during impact pile driving;
- Minimizing the use of the impact hammer to the extent possible by using a vibratory hammer to advance piles as deeply as possible;
- Employing a bubble curtain for all 60- and 72-in piles and for 48-in dolphin piles to reduce noise impacts;
- Development of a marine mammal monitoring and mitigation plan;
- Establishment of shutdown and monitoring zones;
- Visual mitigation monitoring by designated PSOs;
- Site clearance before startup;
- Soft-start procedures; and
- Shutdown procedures.

The sound source levels, and associated sound isopleth radii and shutdown zones, include reductions from bubble curtains. The FWS has not identified any additional (i.e., not already incorporated into TMC's request) mitigation or monitoring measures that are practicable and would further reduce potential impacts to sea otters and their habitat.

Monitoring and Reporting

The purposes of the monitoring requirements are to document and provide data for assessing the effects of specified activities on sea otters; to ensure that the specified activities impacts remain consistent with MMPA standards; and to detect any unanticipated effects on the species. Monitoring plans include steps to document when and how sea otters are encountered, as well as and their numbers and behaviors during these encounters. This information allows the FWS to measure encounter rates and trends and to estimate numbers of animals potentially affected. To the extent possible, monitors will record group size, age, sex, reaction, interaction duration, and closest approach to the project activity.

As described in the request, monitoring activities would be formally summarized and reported. TMC would submit monthly reports for all months during which noise-generating work

takes place as well as a final monitoring report that must submitted no later than 90 days after the IHA expiration.

References Cited

A list of the references cited in this notice may be found at https://www.regulations.gov under Docket No. FWS–R7–ES–2025–0056.

Required Determinations

National Environmental Policy Act

We have prepared a draft environmental assessment in accordance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.). We have preliminarily concluded that issuing the proposed IHA would not significantly affect the quality of the human environment and, thus, preparation of an environmental impact statement for this proposed IHA is not required by section 102(2) of NEPA or its implementing regulations. We are accepting comments on the draft environmental assessment as specified above in **DATES** and **ADDRESSES**.

Endangered Species Act

Under the Endangered Species Act (ESA; 16 U.S.C. 1536(a)(2)), all Federal agencies are required to ensure the actions they authorize are not likely to jeopardize the continued existence of any threatened or endangered species or result in destruction or adverse modification of critical habitat. The specified activities would occur entirely within the range of the Southcentral Alaska stock of northern sea otters, which is not listed as threatened or endangered under the ESA. The authorization of incidental take of northern sea otters and the measures included in the proposed IHA would have no effect on other listed species or their designated critical habitat.

Government-to-Government Consultation

It is our responsibility to communicate and work directly on a Government-to-Government basis with federally recognized Alaska Native Tribes and Alaska Native Claims

Settlement Act (ANCSA) corporations in developing programs for healthy ecosystems. We seek their full and meaningful participation in evaluating and addressing conservation concerns for protected species. It is our goal to remain sensitive to Alaska Native culture, and to make information available to Alaska Tribal organizations and communities. Our efforts are guided by the following policies and directives:

(1) The Native American Policy of the Service (January 20, 2016);

(2) The Alaska Native Relations Policy (currently in draft form);

(3) Executive Order 13175 (January 9, 2000);

(4) Department of the Interior Secretary's Orders 3206 (June 5, 1997), 3225 (January 19, 2001), 3317 (December 1, 2011), and 3342 (October 21, 2016);

(5) The Alaska Government-to-Government Policy (a departmental memorandum issued January 18, 2001); and

(6) the Department of the Interior's policies on consultation with Alaska Native Tribes and organizations.

We have evaluated possible effects of the specified activities on federally recognized Alaska Native Tribes and organizations. The FWS has determined that, due to this project's locations and activities, the Tribal organizations and communities near Seward, Alaska, as well as relevant ANCSA corporations, will not be impacted. Regardless, we will be reaching out to the Tribal organizations and ANCSA corporations to inform them of the availability of this proposed IHA and offer them the opportunity to consult.

We invite continued discussion, either about the project and its impacts or about our coordination and information exchange, throughout the IHA process.

Paperwork Reduction Act

This rule does not contain any new collection of information that requires approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The OMB has previously approved the information collection requirements

associated with IHAs and assigned OMB control number 1018–0194 (expires August 31, 2026). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Proposed Authorization

We propose to authorize the nonlethal, incidental take by Level A harassment and Level B harassment of 347 northern sea otters from the Southcentral Alaska stock. Authorized take may be caused by pile driving and marine construction activities conducted by TMC in Seward, Alaska, for a period of up to one year from the date of finalization. We do not anticipate or authorize any lethal take to sea otters resulting from these activities.

A. *General Conditions for this IHA*

(1) Activities must be conducted in the manner described in the April 7, 2025, revised request from TMC for an IHA and in accordance with all applicable conditions and mitigation measures. The taking of sea otters whenever the required conditions, mitigation, monitoring, and reporting measures are not fully implemented as required by the IHA is prohibited. Failure to follow the measures specified both in the revised request and within this proposed authorization may result in the modification, suspension, or revocation of the IHA.

(2) If project activities cause unauthorized take (i.e., a form of take other than Level A harassment or Level B harassment, or take of one or more sea otters through methods not described in the IHA), TMC must take the following actions:

(i) Cease its activities immediately (or reduce activities to the minimum level necessary to maintain safety);

(ii) Report the details of the incident to the FWS within 48 hours; and

(iii) Suspend further activities until the FWS has reviewed the circumstances and determined whether additional mitigation measures are necessary to avoid further unauthorized taking.

(3) All operations managers, vehicle operators, and machine operators must receive a

copy of this IHA and maintain access to it for reference at all times during project work. These personnel must understand, be fully aware of, and be capable of implementing the IHA's conditions at all times during project work.

(4) This IHA will apply to activities associated with the specified project as described in this document and in TMC's revised request. Changes to the specified project without prior authorization may invalidate the IHA.

(5) TMC's revised request is approved and fully incorporated into this IHA unless exceptions are specifically noted herein. The request includes:

(i) TMC's original request for an IHA, dated November 8, 2024;

(ii) Additional details, provided January 10, 2025;

(iii) An updated application, provided April 7, 2025; and

(iv) Marine Mammal Mitigation and Monitoring Plan.

(6) Operators will allow FWS personnel or the FWS's designated representative to visit project worksites to monitor for impacts to sea otters and subsistence uses of sea otters at any time throughout project activities so long as it is safe to do so. "Operators" are all personnel operating under TMC's authority, including all contractors and subcontractors.

B. *Avoidance and Minimization*

(1) Construction activities must be conducted using equipment that generates the lowest practicable levels of underwater sound within the range of frequencies audible to sea otters.

(2) During all pile-installation activities, regardless of predicted sound levels, a physical interaction shutdown zone of 10 m (33 ft) must be enforced. If a sea otter enters the shutdown zone, in-water activities must be delayed until either the animal has been visually observed outside the shutdown zone, or 15 minutes have elapsed since the last observation time without redetection of the animal.

(3) If the impact driver has been idled for more than 30 minutes, an initial set of three strikes from the impact driver must be delivered at reduced energy, followed by a 1-

minute waiting period, before full-powered proofing strikes.

(4) In-water activity must be conducted in daylight. If environmental conditions prevent visual detection of sea otters within the shutdown zone, in-water activities must be stopped until visibility is regained.

C. *Mitigation Measures for Vessel Operations*

Vessel operators must take every precaution to avoid harassment of sea otters when a vessel is operating near these animals. The applicant must carry out the following measures:

(1) Vessels must remain at least 500 m (0.3 mi) from rafts of sea otters unless safety is a factor. Vessels must reduce speed and maintain a distance of 100 m (328 ft) from all sea otters unless safety is a factor.

(2) Vessels must not be operated in such a way as to separate members of a group of sea otters from other members of the group and must avoid alongshore travel in shallow water (<20 m) whenever practicable.

(3) When weather conditions require, such as when visibility drops, vessels must adjust speed accordingly to avoid the likelihood of injury to sea otters.

(4) Vessel operators must be provided written guidance for avoiding collisions and minimizing disturbances to sea otters. Guidance will include all measures identified in this section.

D. Monitoring

(1) Operators shall work with protected species observers (PSOs) to apply mitigation measures and shall recognize the authority of PSOs up to and including stopping work, except where doing so poses a significant safety risk to personnel.

(2) Duties of the PSOs include watching for and identifying sea otters, recording observation details, documenting presence in any applicable monitoring zone, identifying and documenting potential harassment, and working with operators to implement all appropriate mitigation measures.

(3) A sufficient number of PSOs will be available to meet the following criteria: 100 percent monitoring of exclusion zones during all daytime periods of underwater noise-generating work; a maximum of 4 consecutive hours on watch per PSO; a maximum of approximately 12 hours on watch per day per PSO.

(4) All PSOs will complete a training course designed to familiarize individuals with monitoring and data collection procedures. A field crew leader with prior experience as a sea otter observer will supervise the PSO team. Initially, new or inexperienced PSOs will be paired with experienced PSOs so that the quality of marine mammal observations and data recording is kept consistent. Resumes for candidate PSOs will be made available for the FWS to review.

(5) Observers will be provided with reticule binoculars (7×50 or better), big-eye binoculars or spotting scopes (30×), inclinometers, and range finders. Field guides, instructional handbooks, maps, and a contact list will also be made available.

(6) Observers will collect data using the following procedures:

(i) All data will be recorded onto a field form or database.

(ii) Global positioning system data, sea state, wind force, and weather will be collected at the beginning and end of a monitoring period, every hour in between, at the change of an observer, and upon sightings of sea otters.

(iii) Observation records of sea otters will include date; time; the observer's locations, heading, and speed (if moving); weather; visibility; number of animals; group size and composition (adults/juveniles); and the location of the animals (or distance and direction from the observer).

(iv) Observation records will also include initial behaviors of the sea otters, descriptions of project activities and underwater sound levels being generated, the position of sea otters relative to applicable monitoring and mitigation zones, any mitigation measures applied, and any apparent reactions to the project activities before and after mitigation.

(v) For all sea otters in or near a mitigation zone, observers will record the distance from the sound source to the sea otter upon initial observation, the encounter duration, and the distance at last observation to monitor cumulative sound exposures.

(vi) Observers will note any instances of animals lingering close to or traveling with vessels for prolonged periods of time.

(7) Monitoring of the shutdown zone must continue for 30 minutes following completion of pile installation.

E. *Measures to Reduce Impacts to Subsistence Users*

(1) Prior to conducting the work, TMC will take the following steps to reduce potential effects on subsistence harvest of sea otters:

(i) Avoid work in areas of known sea otter subsistence harvest;

(ii) Discuss the planned activities with subsistence stakeholders including Southcentral Alaska villages and traditional councils;

(iii) Identify and work to resolve concerns of stakeholders regarding the project's effects on subsistence hunting of sea otters; and

(iv) If any concerns remain, develop a POC in consultation with the FWS and subsistence stakeholders to address these concerns.

F. *Reporting Requirements*

(1) The applicant, TMC, must notify the FWS at least 48 hours prior to commencement of activities.

(2) Monthly reports will be submitted to the FWS's Marine Mammal Management office (MMM) for all months during which noise-generating work takes place. The monthly report will contain and summarize the following information: dates, times, weather, and sea conditions (including the Beaufort Scale sea state and wind force conditions) when sea otters were sighted; the number, location, distance from the sound source, and behavior of the sea otters; the associated project activities; and a description of the implementation and

effectiveness of mitigation measures with a discussion of any specific behaviors the sea otters exhibited in response to mitigation.

(3) A final report will be submitted to the FWS's MMM within 90 days after work completion or IHA expiration. The report will include:

(i) A summary of monitoring efforts (hours of monitoring, activities monitored, number of PSOs, and, if requested by the FWS, the daily monitoring logs).

(ii) A description of all project activities, along with any additional work yet to be done. Factors influencing visibility and detectability of marine mammals (e.g., sea state, number of observers, and fog and glare) will be discussed.

(iii) A description of the factors affecting the presence and distribution of sea otters (e.g., weather, sea state, and project activities). An estimate will be included of the number of sea otters exposed to noise at received levels corresponding to Level A harassment or Level B harassment (based on visual observation).

(iv) A description of changes in sea otter behavior resulting from project activities and any specific behaviors of interest.

(v) A discussion of the mitigation measures implemented during project activities and their observed effectiveness for minimizing impacts to sea otters. Sea otter observation records will be provided to the FWS in the form of electronic database or spreadsheet files.

(4) Injured, dead, or distressed sea otters that are not associated with project activities (e.g., animals known to be from outside the project area, previously wounded animals, or carcasses with moderate to advanced decomposition or scavenger damage) must be reported to the FWS within 24 hours of the discovery to either the FWS's MMM Office (1–800–362–5148, business hours); or the Alaska SeaLife Center in Seward (1–888–774–7325, 24 hours a day), or both. Photographs, video, location information, or any other available documentation must be provided to the FWS.

(5) All reports shall be submitted by email to FW7_mmm_reports@fws.gov.

(6) TMC must notify the FWS upon project completion or end of the work season.

Request for Public Comments

If you wish to comment on this proposed authorization, the associated draft environmental assessment, or related documents, you may submit your comments by either of the methods described in **ADDRESSES**. Please identify the document(s) to which your comments pertain, make your comments as specific as possible, confine them to issues pertinent to the proposed authorization, and explain the reason for any changes you recommend. Where possible, your comments should reference the specific section or paragraph that you are addressing. The FWS will consider all comments that are received before the close of the comment period (see **DATES**). The FWS does not anticipate extending the public comment period beyond the 30 days required under section 101(a)(5)(D)(iii) of the MMPA.

Comments, including names and street addresses of respondents, will become part of the administrative record for this proposal. Before including your address, telephone number, email address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comments to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

Peter Fasbender,
Assistant Regional Director for Fisheries and Ecological Services,
Alaska Region,
U.S. Fish and Wildlife Service.
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