Billing Code

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 18

[Docket No. FWS–R7–ES–2024–0195; FXES111607MRG01–245–FF07CAMM00]

RIN 1018–BI08

Marine Mammals; Incidental Take of Northern Sea Otters During Specified Activities; Seward, Sitka, and Kodiak, Alaska

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notification of receipt of application; proposed rule; availability of draft environmental assessment; request for comments.

SUMMARY: We, the U.S. Fish and Wildlife Service, in response to a request under the Marine Mammal Protection Act of 1972, as amended, from the U.S. Coast Guard, propose to issue regulations for the nonlethal, incidental, unintentional take by harassment of small numbers of Southcentral Alaska, Southeast Alaska, and Southwest Alaska stocks of northern sea otters (*Enhydra lutris kenyoni*) during pile driving and marine construction activities in Seward, Sitka, and Kodiak, Alaska. Incidental take of northern sea otters may result from in-water noise generated during pile driving and marine construction activities occurring for a period up to 5 years. This proposed rule would authorize take by harassment only, and no lethal take would be authorized. If this rule is finalized, we will issue letters of authorization for the incidental take of northern sea otters, upon request, for specific activities in accordance with the final rule for a period up to 5 years. We request comments on these proposed regulations.

DATES: Comments on these proposed incidental take regulations and the accompanying draft environmental assessment will be accepted on or before [I**NSERT DATE 30 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER***]. Comments submitted

electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. eastern time on the closing date.

Information collection requirements: If you wish to comment on the information collection requirements in this proposed rule, please note that the Office of Management and Budget (OMB) is required to make a decision concerning the collection of information contained in this proposed rule between 30 and 60 days after publication of this proposed rule in the *Federal Register*. Therefore, comments should be submitted to OMB, with a copy to the FWS Information Collection Clearance Officer, U.S. Fish and Wildlife Service, (see "Information Collection" section below under **ADDRESSES**) by [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER***].

ADDRESSES: *Document availability:* You may view the application package, the associated draft environmental assessment, comments received, and other supporting material at https://www.regulations.gov under Docket No. FWS–R7–ES–2024–0195, or these documents may be requested as described under **FOR FURTHER INFORMATION CONTACT.**

Comment submission: You may submit comments on the proposed rule and draft environmental assessment by one of the following methods:

- *Electronic submission:* Federal eRulemaking Portal at: https://www.regulations.gov. Follow the instructions for submitting comments to Docket No. FWS–R7–ES–2024–0195.
- *U.S. mail:* Public Comments Processing, Attn: Docket No. FWS–R7–ES–2024–0195, Policy and Regulations Branch, U.S. Fish and Wildlife Service, MS: PRB (JAO/3W), 5275 Leesburg Pike, Falls Church, VA 22041–3803.

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.

Information collection requirements: Written comments and suggestions on the information collection requirements should be submitted within 60 days of publication of this notice to https://www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under Review - Open for Public Comments" or by using the search function. Please provide a copy of your comments to the FWS Information Collection Clearance Officer, U.S. Fish and Wildlife Service, 5275 Leesburg Pike, MS: PRB (JAO/3W), Falls Church, VA 22041–3803 (mail); or Info_Coll@fws.gov (email). Please reference "RIN 1018-BI08" in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: Stephanie Burgess, by email at *R7mmmregulatory@fws.gov* or by telephone 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. Please see Docket No. FWS–R7–ES–2024–0195 on https://www.regulations.gov for a document that summarizes this proposed rule.

SUPPLEMENTARY INFORMATION:

Executive Summary

In accordance with the Marine Mammal Protection Act of 1972 (16 U.S.C. 1371(a)(5)(A)) and its implementing regulations, we, the U.S. Fish and Wildlife Service (hereafter FWS or we), propose incidental take regulations that, if finalized, would allow through Letters of Authorization (LOAs) the nonlethal, incidental, unintentional take of small numbers of northern sea otters (*Enhydra lutris kenyoni*) during pile driving and marine construction in Seward, Sitka, and Kodiak, Alaska. If finalized, the rule would be effective for 5 years from the date of issuance.

This proposed rule is based on our preliminary findings that the total takings of sea otters during specified activities will impact small numbers of animals, will have a negligible impact

on this species or stocks, and will not have an unmitigable adverse impact on the availability of northern sea otters for subsistence use by Alaska Natives. We base our preliminary findings on the best available scientific evidence, including but not limited to, data from monitoring the encounters and interactions between sea otters and pile driving and marine construction activities; research on northern sea otters; potential and documented effects on this species from similar activities; information regarding the natural history and conservation status of sea otters; and data reported from Alaska Native subsistence hunters. In conjunction with this proposed rulemaking, we have prepared a draft environmental assessment, which is also available for public review and comment.

The proposed regulations include permissible methods of nonlethal taking; mitigation measures to ensure that the activities of the U.S. Coast Guard (USCG) will have the least practicable adverse impact on the northern sea otters, their habitat, and the availability of this species for subsistence uses; and requirements for monitoring and reporting. Compliance with this rule, if finalized, is not expected to result in significant additional costs to the applicant, and any costs are minimal in comparison to those related to actual pile driving and marine construction activities.

Background

Section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1371(a)(5)(A)) gives the Secretary of the Interior (Secretary) the authority to allow the incidental, but not intentional, taking of small numbers of certain 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) within a specified geographic region. The Secretary has delegated authority for implementation of the MMPA to the FWS. According to the MMPA, the FWS shall allow this incidental taking for a period of up to 5 consecutive years if we find that the total of such taking:

(1) will affect only small numbers of individuals of the species or stock;

(2) will have no more than a negligible impact on the species or stock; and

(3) will not have an unmitigable adverse impact on the availability of the species or stock for taking for subsistence use by Alaska Natives.

If the requisite findings are made, we issue regulations that set forth the following, where applicable:

(a) permissible methods of taking;

(b) 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

(c) requirements for monitoring and reporting of such taking.

If final regulations allowing such incidental take are issued, we may then subsequently issue letters of authorization (LOA), upon request, to authorize incidental take during the specified activities.

The term "take" means to "harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal" (16 U.S.C. 1362(13)). Harassment for activities other than military readiness activities or scientific research conducted by or on behalf of the Federal Government means any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild (the MMPA defines this as Level A harassment), or 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) (16 U.S.C. 1362(18)).

The terms "negligible impact" and "unmitigable adverse impact" are defined in 50 CFR 18.27(c) (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(c). However, we do not rely on that definition here as it conflates "small numbers" with "negligible impact." We recognize "small numbers" and "negligible impacts as two separate and distinct requirements for promulgating incidental take regulations (ITR) 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 marine mammals to be taken 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. In promulgating ITRs, we ensure the least practicable adverse impact by requiring mitigation measures that are effective in reducing the impact of specified activities, but they are not so restrictive as to make specified activities unduly burdensome or impossible to undertake and complete.

The USCG's activities may result in the incidental taking of sea otters. The MMPA does not require that the USCG must obtain incidental take authorization prior to conducting these activities; however, any incidental taking that occurs without authorization is a violation of the MMPA. An ITR was issued to the USCG for pile driving and marine construction activities at multiple locations in Alaska including Seward, Sitka, and Kodiak from May 19, 2023, through May 19, 2028 (88 FR 24115, April 19, 2023). The specified activities described in this proposed ITR are outside the scope of the 2023–2028 USCG ITR, and, therefore, the USCG submitted requests for the incidental take of sea otters during their planned activities.

Summary of Request

On March 5, 2024, the FWS received a request prepared by Weston Solutions on behalf of the U.S. Coast Guard (hereafter, USCG or the applicant) for the nonlethal, incidental harassment of small numbers of northern sea otters (*Enhydra lutris kenyoni*) (hereafter, sea otters unless another sea otter subspecies is specified) from the Southwest Alaska stock that may occur during pile driving and marine construction activities in Womens Bay, Kodiak, Alaska. During discussion with the applicant, a request prepared by WSP Environment and Infrastructure on behalf of the USCG (received January 19, 2024) for the nonlethal, incidental harassment of small numbers of sea otters from the Southcentral Alaska stock that may occur during pile driving and marine construction activities in Seward was combined with the USCG's request prepared by Weston Solutions. Additionally, a request prepared by WSP Environment and Infrastructure on behalf of the USCG (received January 19, 2024) for the nonlethal, incidental harassment of small numbers of sea otters from the Southeast Alaska stock that may occur during pile driving and marine construction activities in Sitka was then merged with the USCG's combined request. The USCG provided additional information regarding project activities, timelines, and mitigation measures for their planned activities in Kodiak, Seward, and Sitka requested by the FWS during correspondence. On October 2, 2024, the FWS received a revised application for activities in Kodiak (hereafter referred to as "Weston Solutions 2024 Request"). On October 3, 2024, the FWS received a revised application for activities in Seward and Sitka (hereafter referred to as "WSP Environment and Infrastructure 2024 Request"). The FWS determined USCG's combined request for activities in Kodiak, Seward, and Sitka to be adequate and complete on October 3, 2024.

The applicant expects take by harassment may occur during pile driving and marine construction activities at three facilities in Alaska: the USCG Moorings Seward in Seward; the USCG Moorings Sitka in Sitka; and the USCG Base Kodiak near Kodiak. These improvements are needed to support the commission, temporary and permanent homeporting, and berthing of

Fast Response Cutters (FRCs) at all three facilities and Offshore Patrol Cutters (OPC) at Kodiak. Hereafter (unless otherwise specified), the terms "pile driving" and "pile-driving activities" are used to refer to both pile installation and pile removal.

Description of the Proposed Regulations

The proposed regulations, if finalized, would allow through LOAs the authorization of nonlethal, incidental, unintentional take of small numbers of sea otters that may result from the specified activities based on standards set forth in the MMPA. They would not authorize or "permit" the activities being conducted by the USCG, only the incidental take of sea otters that may result from those activities. The proposed regulations include:

(1) Permissible methods of nonlethal taking;

(2) Measures designed to ensure the least practicable adverse impact on sea otters and their habitat, and on the availability of this species or stock for subsistence uses; and

(3) Requirements for monitoring and reporting.

Description of Letters of Authorization (LOAs)

An LOA is required to conduct activities pursuant to an ITR. Under this proposed ITR, if finalized, the applicant may request an LOA for the authorized nonlethal, incidental Level B and Level A harassment of sea otters incidental to the specific activities described in these proposed regulations. Per the applicant's request, such entities would be limited to the USCG and their subcontractors. Requests for LOAs must be consistent with the activity descriptions and mitigation and monitoring requirements of the ITR and be received in writing at least 30 days before the activity is to begin. Requests must include (1) an operational plan for the activity, including the number of days of work and the nature of work to be conducted; (2) a digital geospatial file of the project footprint; (3) a site-specific marine mammal monitoring and mitigation plan that specifies the procedures to monitor and mitigate the effects of the activities on sea otters; and (4) Plans of Cooperation (if required as described below). Once this information has been received, we will evaluate each request and issue the LOA for up to a 1-

year period if we find that the level of taking will be consistent with the findings made for the total taking allowable under the ITR. Requests for LOAs may be submitted on an annual basis for additional years of activities within the ITR period. We must receive an after-action report on the monitoring and mitigation activities within 90 days after the LOA expires. For more information on requesting and receiving an LOA, refer to 50 CFR 18.27(f).

Description of Plans of Cooperation (POCs)

A POC is a documented plan describing measures to mitigate potential conflicts between specified activities and Alaska Native subsistence hunting. The circumstances under which a POC must be developed and submitted with a request for an LOA are described below.

To help ensure that specified activities do not have an unmitigable adverse impact on the availability of the species for Alaska Native subsistence hunting opportunities, all applicants requesting an LOA under this ITR must provide the FWS documentation of communication and coordination with Alaska Native communities potentially affected by the specified activity and, as appropriate, with representative subsistence hunting and co-management organizations. If Alaska Native communities or representative subsistence hunting organizations express concerns about the potential impacts of specified activities on subsistence activities, and such concerns are not resolved during this initial communication and coordination process, then a POC must be developed and submitted with the applicant's request for an LOA. In developing the POC, the USCG will further engage with Alaska Native communities and/or representative subsistence hunting organizations to provide information and respond to questions and concerns. The POC must provide adequate measures to ensure that specified activities will not have an unmitigable adverse impact on the availability of sea otters for Alaska Native subsistence uses.

Description of Specified Geographic Region and Specified Activities

The specified geographic region includes Gulf of Alaska coastal waters of three USCG facilities. The specified activities would occur in the waters and intertidal areas of the eastern shore of Resurrection Bay, Alaska, surrounding the USCG Moorings Seward, the waters and

intertidal areas of Sitka Channel, Alaska, surrounding the USCG Moorings Sitka, and the waters and intertidal areas of Womens Bay, Kodiak, Alaska, which surround the USCG Base Kodiak located on the Nyman Peninsula (figure 1).

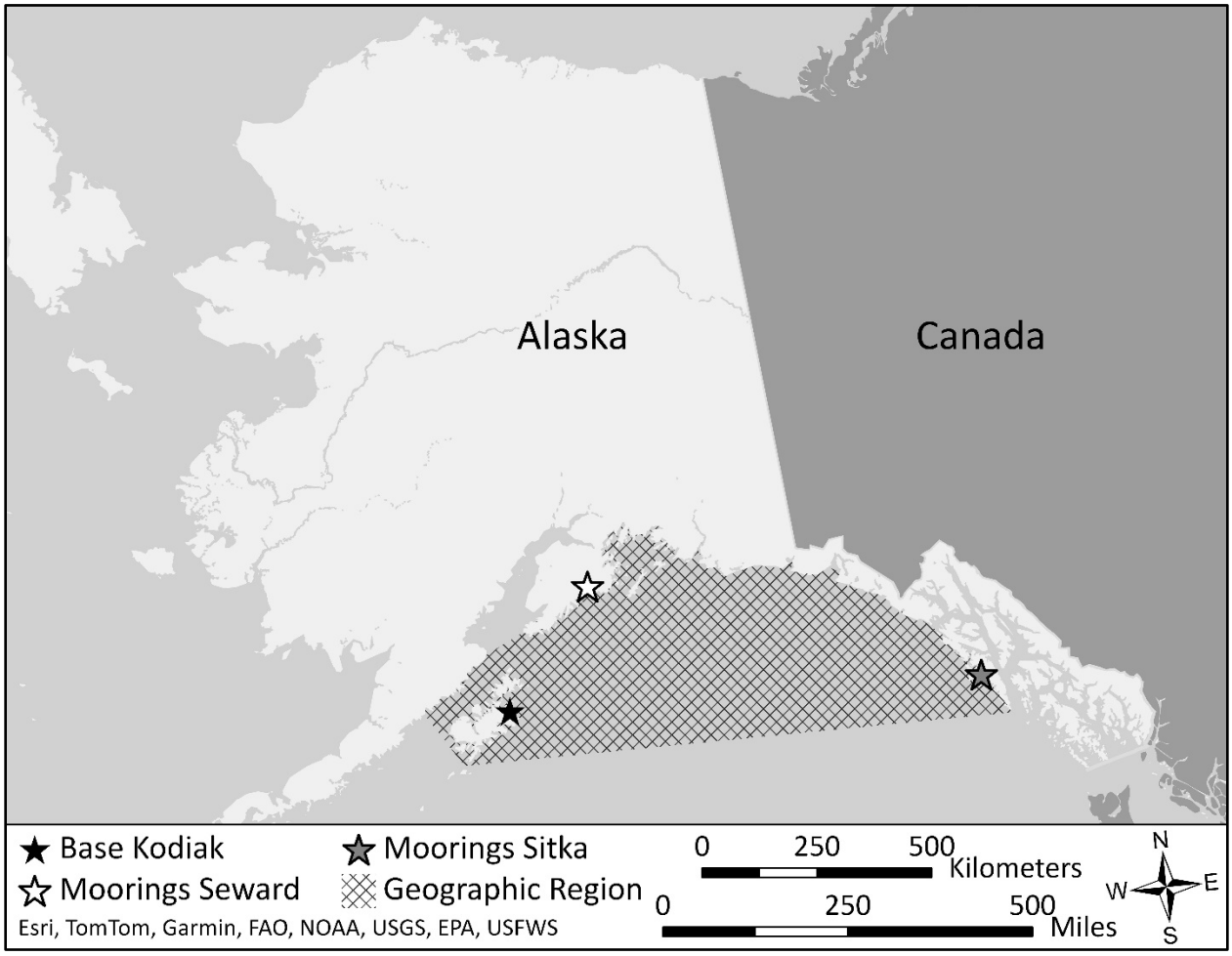


Figure 1—Specific geographic region.

Three pile driving and marine construction projects would occur within the specified geographic region: Moorings Seward, Moorings Sitka, and Base Kodiak. Brief summaries of each project are provided below, and additional project details for each project may be reviewed in the application materials available as described under **ADDRESSES** or may also be requested as described under **FOR FURTHER INFORMATION CONTACT.**

Moorings Seward Activities

The specified activity (hereafter project) in Seward will include installation and removal of piles for the construction of shoreside facilities and associated infrastructure at the USCG

Moorings Seward in the Seward Marine Industrial Center (SMIC) to homeport 1 FRC. The project entails construction of a new floating dock parallel to the existing SMIC dock and reconfiguration of the SMIC floating dock to allow for construction of the FRC moorings. For the reconfiguration of the SMIC floating dock, project activities include the removal of up to 10 existing steel guide piles that are no greater than 40.6 centimeters (cm; 16 inches (in)) in diameter and the installation of up to 10 new concrete or steel pipe guide piles that are 76.2 cm (30 in) in diameter. Construction of the new dock includes installation of up to 20 concrete or steel pipe guide piles that are no greater than 76.2 cm (30 in) in diameter. In-water project activities are summarized in table 1. After the dock is installed, ancillary infrastructure (i.e., electricity, water, sewage) to service the docked FRC will be installed. Pile-driving activities will occur over 22 non-consecutive days for approximately 105 hours. Pile removal will be done with vibratory extraction or cutting at the mud line with a pile clipper or diamond saw. Pile installation will be done with a combination of rock socket down-the-hole (DTH) drilling, impact proofing, and vibratory settling.

Table 1— USCG Moorings Seward: Project Activities, Piles Installed or Removed, and Days of Activity

Project component	Pile size and material	Activity	Total number of piles	Maximum number of piles per day	Maximum number of days of activity
FRC moorings	<40.6-cm (<16-in) steel	Removal–vibratory	10	5	2
		Removal–pile clipper		5	
		Removal–diamond wire saw		5	
	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	10	2	20
		Installation–vibratory settling		2	
		Installation–impact proofing		2	
New dock	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	20	2	
		Installation–vibratory settling		2	
		Installation–impact proofing		2	

Moorings Sitka Activities

The USCG plans to remove a mooring dolphin supported by four concrete piles, each of which is 61.0 cm (24 in) in diameter, and a float supported by six timber piles, each of which is 35.6 cm (14 in) in diameter. To support the pier, floating dock, and mooring dolphins, the USCG plans to install 118 concrete piles, each of which will be 76.2 cm (30 in) in diameter; 54 plastic piles, each of which will be 33.0 cm (13 in) in diameter; and 6 timber piles, each of which will be 35.6 cm (14 in) in diameter. Pile-driving activities will occur over 117 non-consecutive days.

Pile installation will be done with a combination of impact pile driving, vibratory pile driving, and DTH drilling. Temporary and existing piles will be removed by the dead-pull method (a direct lift of the pile using a crane with no vibration), a pile clipper, a diamond saw, or a vibratory hammer. In-water activities are summarized in table 2.

Table 2—USCG Moorings Sitka: Project Activities, Piles Installed or Removed, and Days of Activity

Project component	Pile size and material	Activity	Total number of piles	Maximum number of piles per day	Maximum number of days of activity
Demolition	61.0-cm (24-in) concrete	Removal–vibratory	4	5	1
		Removal–pile clipper		5	
		Removal–diamond wire saw		5	
	35.6-cm (14-in) timber	Removal–vibratory	6	5	2
Construction	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	118	2	84
		Installation–vibratory settling		2	
		Installation–impact proofing		2	
	35.6-cm (14-in) timber	Installation–impact driving	6	2	3
	33.0-cm (13-in) composite	Installation–impact driving	54	2	27

Base Kodiak Activities

The USCG will implement in-water and waterfront improvements at the USCG Base Kodiak to support the commission, temporary and permanent homeporting, and berthing of FRCs and OPCs. In-water improvements will consist of replacing and extending existing wharfs, installing floating docks and camel logs, installing a solid-fill approach bulkhead, and refurbishing small craft floats. In-water activities will include impact pile driving of steel piles and concrete fender piles, vibratory installation and extraction of timber piles, steel piles, steel/concrete piles, concrete piles, and vibroflot columns, and DTH drilling of steel piles. These activities are anticipated to occur over 339 non-consecutive days from 2 to 5 years. A total of 501 piles of various sizes and types will be removed throughout the project. A total of 918 piles of various sizes and types will be installed throughout the project. In-water activities are summarized in table 3.

Table 3—USCG Base Kodiak: Project Activities, Piles Installed or Removed, and Days of Activity

Project component	Project year	Pile size and material	Activity	Total number of piles per year	Maximum number of piles per day	Maximum number of days of activity per year
Demolition	1	35.6-cm (14-in) timber	Removal–vibratory	158	20	10
		61.0-cm (24-in) timber		24	20	2

		30.5-cm (12-in) steel		147	20	9
		35.6-cm (14-in) steel		30	20	2
Construction		61.0-cm (24-in) steel	Installation–vibratory	22	6	5
			Installation–impact	22	6	5
			Installation–DTH	11	2	7
		76.2-cm (30-in) vibroflot columns	Installation–vibratory	488	10	59
		91.4-cm (36-in) steel	Temporary installation–vibratory	94	6	19
			Temporary removal–vibratory	94	6	19
		106.7-cm (42-in) steel	Installation–vibratory	160	6	32
			Installation–impact	160	6	32
		61.0-cm (24-in) steel/concrete	Removal–vibratory	4	20	1
		61.0-cm (24-in) precast concrete reaction	Installation–vibratory	35	6	7
		61.0-cm (24-in) precast concrete fender	Installation–impact	35	6	7
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	80	2	48
	2	61.0-cm (24-in) steel	Installation–vibratory	20	6	4
			Installation–impact	20	6	4
			Installation–DTH	10	2	6
		76.2-cm (30-in) steel	Installation–vibratory	23	6	5
			Installation–impact	23	6	5
		91.4-cm (36-in) steel	Permanent installation–vibratory	8	4	3
			Permanent installation–impact	8	4	3
			Temporary installation–vibratory	44	6	9
			Temporary removal–vibratory	44	6	9
		106.7-cm (42-in) steel	Installation–vibratory	24	6	5
			Installation–impact	24	6	5
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	28	2	17

Description of Marine Mammals in the Specified Geographic Region

Sea Otter Biology

There are three sea otter stocks in Alaska: the Southeast Alaska stock, the Southcentral Alaska stock, and the Southwest Alaska stock. All three Alaskan sea otter stocks are present in the project area. Sea otters at the USCG Moorings Seward belong to the Southcentral Alaska stock. Sea otters at Moorings Sitka belong to the Southeast Alaska stock. Sea otters at the USCG Base Kodiak belong to the Southwest Alaska stock. Detailed information about the biology of these stocks can be found in the most recent stock assessment reports (88 FR 53510, August 8, 2023), which can be found at https:/fws.gov/project/marine-mammal-stock-

assessment-reports. Additionally, the Southwest Alaska stock of sea otters is listed as threatened under the Endangered Species Act (ESA; 16 U.S.C. 1531 et seq.) at 50 CFR 17.11(h) (70 FR 46366; August 9, 2005). Further information on the Southwest Alaska stock is available in the FWS's species status assessment available at: https://ecos.fws.gov/ecp/species/2884.

Northern sea otters occur in nearshore coastal waters from Alaska's Aleutian Islands to Washington (88 FR 53510, August 8, 2023). Sea otters may be distributed anywhere within the specified geographic region other than upland areas; however, they generally occur in shallow water near the shoreline. They are most commonly observed within the 40-meter (m) (131-foot [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) (0.6 to 1.2 miles [mi]) of shore (Riedman and Estes 1990). They tend to be found closer to shore during storms but move farther out during good weather and calm seas (Lensink 1962; Kenyon 1969).

Sea otters are nonmigratory and generally do not disperse over long distances (Garshelis and Garshelis 1984), usually remaining within a few kilometers of their established feeding grounds (Kenyon 1981; Barocas and Ben-David 2021). Breeding males may stay for all or part of the year in a breeding territory ranging from 4 to 11 square kilometers (km^2) (1.5 to 4.2 square miles [mi^2]) (Garshelis and Garshelis 1984; Riedman and Estes 1990; 88 FR 53510, August 8, 2023), while adult females maintain home ranges of approximately 1 to 16 km (0.6 to 10 mi), which may include one or more male breeding territories (Kenyon 1969; Garshelis and Garshelis 1984; Riedman and Estes 1990). Juveniles disperse greater distances after weaning (Garshelis and Garshelis 1984; Garshelis et al. 1984; Monnett and Rotterman 1988; Riedman and Estes 1990). Although sea otters generally remain local to an area, they are capable of long-distance travel. Sea 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).

Southcentral Alaska Sea Otter Stock

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 (~299 ft) of altitude. The combined estimates of the 3 regions resulted in approximately 21,617 sea otters (with a 95 percent confidence interval of 17,324 to 25,910 sea otters) and an average density of 1.96 sea otters/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 FWS's previous stock assessment report in 2014 (88 FR 53510, August 8, 2023). The maximum rate of productivity, which is the maximum net annual increment in population numbers, 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).

Southeast Alaska Sea Otter Stock

The Southeast Alaska sea otter stock boundaries include Dixon Entrance Strait at the U.S.–Canada border to the south and Cape Yakataga to the north (88 FR 53510, August 8, 2023). However, the largest abundances of sea otters in Southeast Alaska are found in the northern part of this range and expanding south to east (Tinker et al. 2019). Sea otters from this stock prefer shallow waters (<40 m in depth), areas close to shore, areas with bathymetric variation (i.e., steep slopes), and areas with straight shorelines (Eisaguirre et al. 2021).

The most recent abundance survey of the Southeast Alaska sea otter stock was conducted in 2022. The stock is estimated at 22,359 sea otters (with a 95 percent Bayesian credible interval of 19,595 to 25,290 sea otters) based on recent photo-based survey data, historic aerial survey

data, and an applied ecological diffusion model to calculate stock-wide abundance (Eisaguirre et al. 2021, 2023; Schuette et al. 2023; 88 FR 53510, August 8, 2023). The trend for the Southeast Alaska sea otter stock has increased steadily over time (Schuette et al. 2023; 88 FR 53510, August 8, 2023). The maximum productivity rate is estimated at 29 percent (Eisaguirre et al. 2021; 88 FR 53510, August 8, 2023). This stock is classified as non-strategic under the MMPA (88 FR 53510, August 8, 2023). Abundance values within the Moorings Sitka project area ranged from 0.065 to 0.65 sea otters/km^2.

Southwest Alaska Sea Otter Stock

The Southwest Alaska sea otter stock occurs from western Cook Inlet to Attu Island in the Aleutian chain (88 FR 53510, August 8, 2023). Between 2014 and 2021, surveys to estimate sea otter population size were conducted in the following locations: Aleutian Islands, Bristol Bay, South Alaska Peninsula, Kodiak Archipelago, Katmai National Park, western Cook Inlet, and Kamishak Bay (USFWS 2020; 88 FR 53510, August 8, 2023). The combined population estimates from these surveys resulted in a total estimate of 51,935 sea otters for the Southwest Alaska sea otter stock (a global coefficient of variation is unavailable for the Southwest Alaska stock due to the different survey methods and analytical approaches used for population assessments in each of the five management units). The overall trend for the Southwest Alaska sea otter stock is generally stable to increasing (88 FR 53510, August 8, 2023). The maximum rate of productivity is estimated at 29 percent (Eisaguirre et al. 2021; 88 FR 53510, August 8, 2023).

The Southwest Alaska sea otter stock was listed as threatened under the ESA in 2005 as a distinct population segment (DPS) due to sea otter population declines throughout the stock's range (70 FR 46366, August 9, 2005). A rule for this stock under section 4(d) of the ESA was promulgated in 2006 (71 FR 46864, August 15, 2006), and critical habitat was designated for the stock in 2009 (74 FR 51988, October 8, 2009). Sea otter critical habitat consists of areas within the 20-m (66-ft) depth contour, areas within the 100-m (328-ft) nearshore waters, and areas

where the 20-m (66-ft) depth contour and 100-m (328-ft) nearshore waters overlap (74 FR 51988, October 8, 2009). The specified activities that would occur at Kodiak overlap with 1.61 km^2 (0.62 mi^2) of critical habitat for the Southwest Alaska sea otter stock. Sea otters' preference for shallow water may be related to diving depth limits and avoidance of large predators, such as killer whales (*Orcinus orca*) (Wilson et al. 2021; Monson 2021; Tinker et al. 2023), which have purportedly contributed to recent declines in the Southwest Alaska sea otter stock (78 FR 54905, September 6, 2013; Tinker et al. 2021). Sea otters' frequent use of shallow waters to avoid predation has allowed sea otter populations in the Southwest Alaska stock to persist, but this preference for shallow waters restricts habitat use and reduces population connectivity, which can impact population recovery (Tinker et al. 2023).

Under the ESA, the Southwest Alaska sea otter stock is divided into five management units (MU): Western Aleutians; Eastern Aleutians; South Alaska Peninsula; Bristol Bay; and Kodiak, Kamishak, and Alaska Peninsula (88 FR 53510, August 8, 2023). The specified geographic region occurs within the range of the Kodiak, Kamishak, and Alaska Peninsula MU.

The range of the Kodiak, Kamishak, and Alaska Peninsula MU extends from Chignik Bay to Western Cook Inlet on the southern side of the Alaska Peninsula, and it also encompasses Kodiak Island (USFWS 2020). The specified geographic region is within the range of the sea otter population at Kodiak Archipelago. The most recent aerial surveys to estimate sea otter population size in the Kodiak Archipelago were conducted in 2014. The overall sea otter density estimate within this area was 1.56 sea otters/km^2 (Cobb 2018; USFWS 2020). The population trend for sea otters in the Kodiak Archipelago appears to be increasing between the 2004 and 2014 surveys after exhibiting a decline between the 1994 and 2001 surveys (88 FR 53510, August 8, 2023). Sea otters were not uniformly distributed throughout the Kodiak Archipelago. Sea otter density was estimated to be 2.54 sea otters/km^2 in high sea otter density area, which is the area between shore and 400 m (1,312 ft) seaward, or the 40-m (131-ft) depth contour, whichever was greater. Sea otter density was estimated to be 0.30 sea otters/km^2 in low sea otter

density area, which is the area between the high sea otter density area boundary and 2 km (1.2 mi) offshore, or the 100-m (328-ft) depth contour, whichever was greater (Cobb 2018). Sea otter density was highest in the straits between Kodiak, Raspberry, and Shuyak Islands. Few sea otters were observed on the eastern side of Kodiak Island (Cobb 2018).

Climate Change

The effects of climate change in the northern latitudes include increases in water and air temperatures, reductions in seasonal sea ice, increases in acidity of seawater, increases in coastal erosion, and changes in timing and intensity of storm events (Intergovernmental Panel on Climate Change 2014). Increasing ocean temperatures and changes in sea ice could allow species to expand or change their traditional ranges, allowing species that were previously geographically isolated from one another to share the same area. This interaction between species could introduce novel pathogens into populations. For example, phocine distemper virus was introduced to marine mammals in the Pacific Ocean, likely by seals traveling from the Atlantic Ocean (Goldstein et al. 2009). The loss of sea ice may facilitate additional introductions of novel pathogens to marine mammals in the Arctic and Pacific Oceans. Sea otters are susceptible to mortality from infections by a number of viruses, bacteria, and parasites (Burek-Huntington et al. 2021; Barratclough et al. 2023). For example, *Strep* syndrome has been recorded as one of the leading causes of death in northern sea otters in Alaska, especially in subadults who have not yet reproduced (Burek-Huntington et al. 2021; Barratclough et al. 2023). It is unknown what the long-term impacts of diseases are for sea otter populations and how climate change may affect disease rates in sea otter populations.

Climate change may also indirectly affect sea otters by altering the abundance, distribution, composition, and the quality of benthic invertebrates (Wassmann et al. 2011; Renaud et al. 2015), including the clams, urchins, and mussels eaten by sea otters. Increases in ocean temperatures and changes in sea ice may allow southern invertebrate species to move northward and create more resource competition for Arctic species. It is possible that Arctic

species and overall species richness may decline as a result of increasing ocean temperatures (Renaud et al. 2015). However, there is a great deal of uncertainty and variability in the predicted effects of increased ocean temperatures and sea ice changes on benthic productivity (Post et al. 2013), and these potential impacts are likely to vary throughout the sea otter's range. Another potential concern with increased ocean temperatures is elevated levels of biotoxins in bivalve mollusks associated with harmful algal blooms (HABs) (Burek et al. 2008; Gulland et al. 2022; 88 FR 53510, August 8, 2023). Biotoxins bioaccumulate through trophic levels to sea otters and other top-level predators when they consume contaminated prey (Miller et al. 2010). Biotoxin exposure causes lesions in the central nervous system and cardiovascular system of sea otters (Miller et al. 2021), which can cause or contribute to mortality. For example, biotoxin concentrations were detected in 29 percent of sea otters examined for causes of mortality, and HAB toxicosis was considered the main cause of death for 2 of the 144 sea otters examined (Burek-Huntington et al. 2021). It is not well understood what impact HABs may have on the health of sea otter populations that are exposed to and uptake biotoxins through prey sources (88 FR 53510, August 8, 2023).

Climate change may also impact sea otter prey species through ocean acidification. Ocean acidification increases as the atmospheric concentrations of greenhouse gases rise. Clams, snails, and crabs, which are prevalent in sea otter diets, contain calcium-based shells, which may be corroded from ocean acidification. The early life stages of some bivalves and gastropods are likely to be negatively affected (Kroeker et al. 2013; 88 FR 53510, August 8, 2023), particularly the broadcast spawners that have an extended pelagic larval phase. Some sea otter prey species may be more tolerant, especially those that are periodically exposed to acidified seawater under natural conditions. Sea otters eat a variety of different benthic organisms (LaRoche et al. 2021), and this variability in their diet may provide some resiliency against the changes in prey availability due to ocean acidification.

Climate change has the potential to impact sea otters by altering species ranges and interactions, introducing novel pathogens, and changing the availability, distribution, and quality of prey species. However, there is a great deal of uncertainty and variability in the predicted effects of climate change on sea otters and their prey species. Sea otters also exhibit behavioral flexibility and diversity in their prey consumption (LaRoche et al. 2021), which may allow them to adapt to climate change effects. For example, sea otters show a high degree of individuality and diversity in their diet and foraging behavior that allow them to compete in an environment with limited food resources (Tinker et al. 2008; LaRoche et al. 2021). Evidence shows that sea otters may also be able to attenuate the effects of climate change through top-down effects within their ecosystem. For example, the rising ocean temperatures and ocean acidification parallel a decline in skeletal density of *Clathromorphum nereostratum*, a red alga found in kelp forests. This reduction in skeletal density makes the algae more susceptible to lethal grazing by sea urchins. Sea otters regulate sea urchin populations through prey consumption, which helps maintain equilibrium within kelp forests and potentially mitigate the effects of climate change within kelp forests (Rasher et al. 2020). More information is needed to better understand how climate change impacts sea otters and how sea otter populations respond to climate change impacts.

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 receives, 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 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). Sea otters are more adept at aerial hearing and their sensitivity is similar to that of terrestrial carnivores (Reichmuth and Ghoul 2012; Ghoul and Reichmuth 2016; Zellmer et al. 2021). 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 116 and 101 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. Sea otters do not rely on sound to orient themselves, locate prey, or communicate under water; therefore, masking of communications by anthropogenic noise 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 (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 damage to hair cells within the inner ear system (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. 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). A TTS is a noise-induced threshold shift in hearing sensitivity that fully recovers over time (Finneran 2015). 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. Based on these analyses, Southall et al. (2019) predict that PTS for sea otters will occur at 232 dB peak or 203 dB SEL_{CUM} for impulsive underwater sound and 219 dB SEL for nonimpulsive (continuous) underwater sound.

The NMFS (2018) criteria do not identify thresholds for avoidance of Level B harassment. For pinnipeds (seals and sea lions), NMFS has adopted a 160-dB threshold for Level B harassment from exposure to impulsive noise and a 120-dB threshold for continuous noise (High Energy Seismic Survey Team 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 to 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 (SPLs) 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). While gray whales exhibited avoidance to industrial noise at the 120-dB threshold, 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 take by Level B harassment of sea otters in this proposed ITR. 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 noise levels between 125 Hz and 38 kHz are 232 dB peak or 203 dB SEL for impulsive sounds and 219 dB SEL for continuous sounds (table 4).

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 noise, 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.

Table 4—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).

Evidence from Sea Otter Studies

Sea otters may be more resistant to the effects of acoustic disturbance and human activities than other marine mammals. For example, observers have noted no changes from southern sea otters in regard to their presence, density, or behavior in response to underwater sounds from industrial noise recordings at 110 dB and a frequency range of 50 Hz to 20 kHz and airguns, even at the closest distance of 0.5 nautical miles (<1 km or 0.6 mi) (Riedman 1983). Southern sea otters did not respond noticeably to noise from a single 1,638 cubic centimeters (cm^3) (100 cubic inches [in^3]) airgun, and no sea otter disturbance reactions were evident when a 67,006-cm^3 (4,089-in^3) airgun array was as close as 0.9 km (0.6 mi) to sea otters (Riedman 1983, 1984). However, southern sea otters displayed slight reactions to airborne engine noise (Riedman 1983). Northern sea otters were observed to exhibit a limited response to a variety of airborne and underwater sounds, including a warble tone, sea otter pup calls, calls from killer whales (*Orcinus orca*) (which are predators to sea otters), air horns, and an underwater noise harassment system designed to drive marine mammals away from crude oil spills (Davis et al. 1988). These sounds elicited reactions from northern sea otters, including startle responses and movement away from noise sources. However, these reactions were observed only when northern sea otters were within 100 to 200 m (328 to 656 ft) of noise sources. Further, northern sea otters appeared to become habituated to the noises within 2 hours or, at most, 3 to 4 days (Davis et al. 1988).

Noise exposure may be influenced by the amount of time sea otters spend at the water's surface. Noise at the water's surface can be attenuated by turbulence from wind and waves more quickly compared to deeper water, reducing potential noise exposure (Greene and Richardson 1988; Richardson et al. 1995). Additionally, turbulence at the water's surface limits the transference of sound from water to air. A sea otter with its head above water will be exposed to only a small fraction of the sound energy traveling through the water beneath it. The average amount of time that sea otters spend above the water each day while resting and grooming varies between males and females and across seasons (Esslinger et al. 2014; Zellmer et al. 2021). For

example, female sea otters foraged for an average of 8.78 hours per day compared to male sea otters, which foraged for an average of 7.85 hours per day during the summer months (Esslinger et al. 2014). Sea otters spend an average of 63 to 67 percent of their day at the surface resting and grooming during the summer months (Esslinger et al. 2014). Few studies have evaluated foraging times during the winter months. Garshelis et al. (1986) found that foraging times increased from 5.1 hours per day to 16.6 hours per day in the winter; however, Gelatt et al. (2002) did not find a significant difference in seasonal foraging times. It is likely that seasonal variation is determined by seasonal differences in energetic demand and the quality and availability of prey sources (Esslinger et al. 2014). These results suggest that the large portion of the day that sea otters spend at the surface may help limit sea otters' exposure during noise-generating operations.

Sea otter sensitivity to industrial activities may be influenced by the overall level of human activity within the sea otter population's range. In locations that lack frequent human activity, sea otters appear to have a lower threshold for disturbance (Benham 2006). Sea otters in Alaska exhibited escape behaviors in response to the presence and approach of vessels (Udevitz et al. 1995). Behaviors included diving or actively swimming away from a vessel, entering the water from haulouts, and disbanding groups with sea otters swimming in multiple different directions (Udevitz et al. 1995). Sea otters in Alaska were also observed to avoid areas with heavy vessel traffic in the summer and return to these areas during seasons with less vessel traffic (Garshelis and Garshelis 1984). In Cook Inlet, sea otters drifting on a tide trajectory that would have taken them within 500 m (0.3 mi) of an active offshore drilling rig were observed to swim in order to avoid a close approach of the drilling rig despite near-ambient noise levels (BlueCrest 2013).

Individual sea otters in the Seward, Sitka, and Kodiak areas 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. For example, sea otters spend more time traveling in areas with high levels of disturbance (Curland 1997). Higher energetic costs require increased amounts of prey consumption (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), we expect some sea otters 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.

Consequences of Permanent Threshold Shift

Sea otters exposed to noise levels above Level A harassment threshold criteria may experience a permanent shift in the sensitivity of their hearing. This shift would cause the sea otter to be permanently unable to hear sounds at frequencies similar to those that caused the initial injury. Pile driving and marine construction activities are typically low-frequency (e.g., less than 2 kHz), thus sea otters may lose their ability to hear low-frequency sounds as a result of exposure to noise levels above Level A harassment thresholds. However, the injury is not anticipated to result in total hearing loss. We do not anticipate that a reduction in hearing sensitivity would significantly affect a sea otter's health, reproduction, or survival or otherwise cause any population-level effects. The potential effects of repeated exposure to noise levels above Level A harassment thresholds may include a greater reduction in a sea otter's hearing sensitivity if the sea otter is exposed to different sound frequencies that can cause PTS. While sea otters do not rely on sound to orient themselves, locate prey, or communicate under water, 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). However, we anticipate

that a sea otter will retain the majority of its hearing range if it experiences PTS from multiple Level A harassment noise exposures and that impacts from PTS will not have long-term consequences to a sea otter's survival and reproduction. Therefore, we do not anticipate impacts to sea otters' ability to move, forage, or communicate as a result of PTS from one or multiple Level A harassment noise exposures. We also anticipate that sea otters will move away from Level A harassment zones to avoid experiencing PTS.

Consequences of Disturbance

The reactions of wildlife to disturbance can range from short-term behavioral changes to long-term impacts that affect survival and reproduction. When disturbed by noise, animals may respond behaviorally (e.g., escape response) or physiologically (e.g., increased heart rate, hormonal response) (Harms et al. 1997; Tempel and Gutiérrez 2003). Theoretically, the energy expense and associated physiological effects from repeated disturbance could ultimately lead to reduced survival and reproduction (Gill and Sutherland 2000; Frid and Dill 2002). For example, South American sea lions (*Otaria byronia*) visited by tourists exhibited an increase in the state of alertness and a decrease in maternal attendance and resting time on land, thereby potentially reducing population size (Pavez et al. 2015). In another example, killer whales that lost feeding opportunities due to vessel traffic faced a substantial (18 percent) estimated decrease in energy intake (Williams et al. 2002). In severe cases, such disturbance effects can have population-level consequences. For example, increased disturbance by tourism vessels has been associated with a decline in abundance of bottlenose dolphins (*Tursiops* spp.) (Bejder et al. 2006; Lusseau et al. 2006). However, these examples evaluated sources of disturbance that were longer term and more consistent than the temporary and intermittent nature of the specified project activities.

These examples illustrate direct effects on survival and reproductive success, but disturbances can also have indirect effects. Response to acoustic disturbance is considered a nonlethal stimulus that is similar to an antipredator response (Frid and Dill 2002). Sea otters are susceptible to predation, particularly from killer whales and eagles, and have a well-developed

antipredator response to perceived threats. For example, the presence of a harbor seal (*Phoca vitulina*) did not appear to disturb southern sea otters, but they demonstrated a fear response in the presence of a California sea lion by actively looking above and beneath the water (Limbaugh 1961).

Although an increase in vigilance or a flight response is nonlethal, a tradeoff occurs between risk avoidance and energy conservation. An animal's reactions to acoustic disturbance may cause stress and direct an animal's energy away from fitness-enhancing activities such as feeding and mating (Frid and Dill 2002; Goudie and Jones 2004). For example, southern sea otters in areas with heavy recreational vessel traffic demonstrated changes in behavioral time budgeting, showing decreased time resting and changes in haulout patterns and distribution (Benham 2006; Maldini et al. 2012). Chronic stress can also lead to weakened reflexes, lowered learning responses (Welch and Welch 1970; van Polanen Petel et al. 2006), compromised immune function, decreased body weight, and abnormal thyroid function (Selye 1979).

Changes in behavior resulting from anthropogenic disturbance can include increased agonistic interactions between individuals or temporary or permanent abandonment of an area (Barton et al. 1998). Additionally, the extent of previous exposure to humans (Holcomb et al. 2009), the type of disturbance (Andersen et al. 2012), and the age or sex of the individuals (Shaughnessy et al. 2008; Holcomb et al. 2009) may influence the type and extent of response in individual sea otters.

Vessel Activities

Vessel collisions with marine mammals can result in death or serious injury. Wounds resulting from vessel strike may include massive trauma, hemorrhaging, broken bones, or propeller lacerations (Knowlton and Kraus 2001). An animal may be harmed by a vessel when the vessel runs over the animal at the surface, the animal hits the bottom of a vessel while the animal is surfacing, or the animal is cut by a vessel's propeller.

Mortality associated with vessel strike has been determined based on recovery of carcasses with lacerations indicative of propeller injuries (Wild and Ames 1974; Morejohn et al. 1975). Studies have shown that trauma-related injuries, such as those caused by vessel strikes, were a common cause of mortality in northern sea otters (White et al. 2018; Burek-Huntington et al. 2021). Based on necropsy results from sea otters in Alaska, trauma was found to be the cause of death in ~4 percent (65 of 1,474 sea otter necropsies from 1996 to 2019) and ~16 percent (128 of 780 sea otter necropsies from 2002 to 2012) (USFWS 2020; Burek-Huntington et al. 2021). Necropsies of sea otters in which trauma was determined to be the ultimate cause of death show that disease or biotoxin exposure can be a contributing factor, which incapacitated the sea otter and made it more vulnerable to vessel strike (Burek-Huntington et al. 2021; 88 FR 53510, August 8, 2023).

Vessel speed influences the likelihood of vessel strikes involving sea otters. The probability of death or serious injury to a marine mammal increases as vessel speed increases (Laist et al. 2001; Vanderlaan and Taggart 2007). Sea otters spend a considerable portion of their time at the water's surface (Esslinger et al. 2014). They are typically visually aware of approaching vessels and can move away if a vessel is not traveling too quickly. Mitigation measures to be applied to vessel operations to prevent collisions or interactions are included below in the proposed regulations in § 18.107 Mitigation.

Sea otters exhibit behavioral flexibility in response to vessels, and their responses may be influenced by the intensity and duration of the vessel's activity. For example, sea otter populations in Alaska were observed to avoid areas with heavy vessel traffic but return to those same areas during seasons with less vessel traffic (Garshelis and Garshelis 1984). Sea otters have also shown signs of disturbance or escape behaviors in response to the presence and approach of survey vessels including sea otters diving and/or actively swimming away from a vessel, sea otters on haulouts entering the water, and groups of sea otters disbanding and swimming in multiple different directions (Udevitz et al. 1995).

Additionally, responses to vessels may be influenced by the individual sea otter's previous experience with vessels. Groups of southern sea otters in two locations in California showed markedly different responses to kayakers approaching to specific distances, suggesting a different level of tolerance between the groups (Gunvalson 2011). Benham (2006) found evidence that the sea otters exposed to high levels of recreational activity may have become more tolerant than individuals in less disturbed areas. Sea otters off the California coast showed only mild interest in vessels passing within hundreds of meters and appeared to have habituated to vessel traffic (Riedman 1983; Curland 1997). These results indicate that sea otters may adjust their responses to vessel activities depending on the level of activity.

Vessel activity for the work in Seward may include the use of barges within the SMIC boat basin to stage equipment and materials as necessary. Protected Species Observers (PSOs) may also be stationed on a barge or in a small vessel to monitor for marine mammals and implement mitigation measures. Vessels will not be used extensively or over a long duration during project activities in Seward. Vessel operations for project activities in Sitka and Kodiak may include transportation of personnel, supplies, and equipment via barges, tugs, and skiffs. Vessels will be used each day of project activities to transport personnel and equipment between land and the construction barge and to support construction operations. We do not anticipate that sea otters will experience changes in behavior indicative of harassment during vessel operations. Additionally, vessel operators for all projects would take every precaution to avoid harassment of sea otters when a vessel is operating near sea otters and implement mitigation measures described below in the proposed regulations in § 18.107 Mitigation.

Effects on Sea Otter Habitat and Prey

Physical and biological features of habitat essential to the conservation of sea otters include the benthic invertebrates eaten by sea otters, shallow rocky areas, and kelp (e.g., bull kelp (*Nereocystis luetkeana*) and dragon kelp (*Eualaria fistulosa*)) beds that provide cover from predators. Sea otter habitat in the project area includes coastal areas within the 40-m (131-ft)

depth contour where high densities of sea otters have been detected (Riedman and Estes 1990; Tinker et al. 2019; 88 FR 53510, August 8, 2023).

Industrial activities, such as pile driving and marine construction, may generate in-water noise at levels that can temporarily displace sea otters from important habitat containing sea otter prey species. The primary prey species for sea otters are sea urchins (*Strongylocentrotus* spp. and *Mesocentrotus* spp.), abalone (*Haliotis* spp.), clams (e.g., *Clinocardium nuttallii, Leukoma staminea*, and *Saxidomus gigantea*), mussels (*Mytilus* spp.), crabs (e.g., *Metacarcinus magister, Pugettia* spp., *Telemessus cheiragonus*, and *Cancer* spp.), and squid (*Loligo* spp.) (LaRoche et al. 2021). When preferred prey are scarce, sea otters will also eat kelp, slow-moving benthic fishes, sea cucumbers (e.g., *Apostichopus californicus*), egg cases of rays, turban snails (*Tegula* spp.), octopuses (e.g., *Octopus* spp.), barnacles (*Balanus* spp.), sea stars (e.g., *Pycnopodia helianthoides)*, scallops (e.g., *Patinopecten caurinus)*, rock oysters (*Saccostrea* spp.), worms (e.g., *Eudistylia* spp.), and chitons (e.g., *Mopalia* spp.) (Riedman and Estes 1990; Davis and Bodkin 2021). Sea otters eat a variety of benthic organisms (LaRoche et al. 2021), and this variability in their diet may provide some resiliency against the impacts of habitat displacement.

Noise may also affect benthic invertebrates (Tidau and Briffa 2016; Carroll et al. 2017). Behavioral changes, such as an increase in lobster (*Homanus americanus*) feeding levels (Payne et al. 2007), an increase in avoidance behavior by wild-caught captive reef squid (*Sepioteuthis australis*) (Fewtrell and McCauley 2012), and deeper digging by razor clams (*Sinonovacula constricta*) (Peng et al. 2016) have been observed following experimental exposures to sound. Physical changes have also been observed in response to increased sound levels, including changes in serum biochemistry and hepatopancreatic cells in lobsters (Payne et al. 2007) and long-term damage to the statocysts required for hearing in several cephalopod species (André et al. 2011; Solé et al. 2013, 2019). De Soto et al. (2013) found impaired embryonic development in scallop (*Pecten novaezelandiae*) larvae when exposed to 160 dB. Christian et al. (2003) noted a reduction in the speed of egg development of bottom-dwelling crabs following exposure to

noise; however, the sound level (221 dB at 2 m or 6.6 ft) was far higher than the proposed project activities will produce. Industrial noise can also impact larval settlement by masking the natural acoustic settlement cues for crustaceans and fish (Pine et al. 2012; Simpson et al. 2016; Tidau and Briffa 2016).

While these studies provide evidence of deleterious effects to invertebrates as a result of increased sound levels, Carroll et al. (2017) caution that there is a wide disparity between results obtained in field and laboratory settings. In experimental settings, changes were observed only when animals were housed in enclosed tanks, and many were exposed to prolonged bouts of continuous, pure tones. We would not expect similar results in open marine conditions. It is unlikely that noises generated by project activities will have any lasting effect on sea otter prey given the short-term duration of noise produced by each component of the proposed work.

Noise-generating activities that interact with the seabed can produce vibrations, resulting in the disturbance of sediment and increased turbidity in the water. Although turbidity is likely to have little impact on sea otters and prey species (Todd et al. 2015), there may be some impacts from vibrations and increased sedimentation. For example, mussels (*Mytilus edulis*) exhibited changes in valve gape and oxygen demand, and hermit crabs (*Pagurus bernhardus*) exhibited limited behavioral changes in response to vibrations caused by pile driving (Roberts et al. 2016). Increased sedimentation is likely to reduce sea otter visibility, which may result in reduced foraging efficiency and a potential shift to less-preferred prey species. These outcomes may cause sea otters to spend more energy on foraging or processing the prey items; however, the impacts of a change in energy expenditure are not likely seen at the population level (Newsome et al. 2015). Additionally, the benthic invertebrates may be impacted by increased sedimentation, resulting in higher abundances of opportunistic species that recover quickly from industrial activities that increase sedimentation (Kotta et al. 2009). Although sea otter foraging could be impacted by industrial activities that cause vibrations and increased sedimentation, it is more

likely that sea otters would be temporarily displaced from the project area due to impacts from noise rather than vibrations and sedimentation.

Work in Seward is expected to be completed in less than 1 year and there are only 22 days of in-water work planned. We anticipate that any displacement of sea otters due to project activities will be temporary and short term and any potential impacts to sea otter prey species and habitat will be limited. In Sitka, 117 days of work will be spread across a single year. We anticipate that any displacement of sea otters and potential impacts to sea otter prey and habitat due to project activities in Sitka will be temporary, short-term, and limited. If displacement of sea otters and potential impacts to sea otter prey and habitat are more than short-term and limited, we would expect them to be similar in nature but smaller in magnitude than those described for Kodiak.

Project activities in Kodiak would occur across multiple years. If sea otters are displaced for multiple years due to project activities in the area, this long-term displacement may impact sea otter prey species and habitat. Sea otter predation generally reduces the density and size of invertebrate prey species in the area and maintains an equilibrium of biodiversity in nearshore habitats (Coletti 2021). Removal of sea otters may result in a range of effects to nearshore habitats and prey species. These effects may range from limited to substantial changes and are dependent on a variety of factors in the nearshore ecosystem such as sea otter density, occupation time, and prey species recruitment rates. For example, following an approximate 90 percent decline in sea otter populations in the Aleutian archipelago, sea urchins experienced an eightfold increase in biomass and kelp density declined by nearly 90 percent across 10 years (Estes et al. 1998). Conversely, sea urchin biomass and kelp abundance experienced little to no change in response to the sea otter populations declining by approximately 50 percent across 9 years in PWS and approximately 70 percent across 10 years at the Semichi Islands (Dean et al. 2000; Konar 2000).

Potential Impacts of the Specified Activities on Subsistence Uses

The specified activities will occur near marine subsistence harvest areas used by Alaska Natives surrounding the USCG facilities in Seward, Sitka, and Kodiak. Table 5 shows the number of sea otters taken by subsistence hunting between 2013 and 2023 in the communities where the specified activities would occur.

Table 5—Sea Otters: Subsistence Hunting Totals and Average Number Harvested Per Year
[Seward, Sitka, and Kodiak, AK, 2013 through 2023]

Location	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total	Average (rounded to nearest whole number)
Seward	0	0	0	0	0	0	0	0	0	0	2	2	0
Sitka	539	354	325	356	340	160	229	85	139	127	184	2,838	258
Kodiak	34	52	21	103	31	10	58	34	56	37	27	463	42

No subsistence harvest of sea otters was documented in Seward from 2013 through 2022, and only two sea otters were harvested in 2023.

Sitka has a consistently high level of subsistence harvest activity and harvest locations frequently range up to ~48 km (30 mi) from Sitka and throughout Sitka Sound. Although some harvest activity takes place within a few miles of the city, the anticipated effects from the USCG's work are constrained to Sitka Channel, which does not see harvest activity or hunting effort.

Subsistence harvest of sea otters around Kodiak Island takes place primarily in Whale Pass, Womens Bay, Whale Passage, and Kizhuyak Bay with totals of 81, 61, 37, and 34 sea otters taken, respectively, from 2013 through 2023.

As all three work sites are active USCG facilities, the proposed project does not 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. Furthermore, the USCG facilities are within developed areas and city limits, where firearm use is prohibited. Despite no conflict with subsistence use being anticipated, the FWS will be conducting outreach with potentially affected communities to see whether there are any questions, concerns, or potential conflicts regarding subsistence use in those areas. If any conflicts are identified in the future, the USCG

will develop a plan of cooperation specifying the particular steps necessary to minimize any effects the project may have on subsistence harvest.

Estimated Take

Definitions of Incidental Take Under the MMPA

Under the MMPA, "take" means "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal" (16 U.S.C. 1362(13)). Below we provide definitions of three potential types of take of sea otters. The FWS does not anticipate and is not proposing to authorize lethal take as a part of the proposed rule; however, the definitions of these take types are provided for context and background.

Lethal Take

In the most serious interactions, human actions can result in the mortality of sea otters, which we define here as lethal take.

Level A Harassment

The MMPA defines Level A harassment, for nonmilitary readiness activities, as "any act of pursuit, torment, or annoyance which . . . has the potential to injure a marine mammal or marine mammal stock in the wild" (16 U.S.C. 1362(18)(A)(i), (C)). We interpret this definition to include human activity that may result in the injury of sea otters.

Level B Harassment

The MMPA defines Level B harassment for nonmilitary readiness activities as "any act of pursuit, torment, or annoyance which . . . 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, feeding, or sheltering" (16 U.S.C. 1362(18)(A)(ii), (D)). We interpret this definition to include human-caused reactions that disrupt biologically significant behaviors or activities for the affected animal. Such reactions include, but are not limited to, the following:

- 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 (i.e., group of 10 or more sea otters) so that the raft disperses;
- Sudden diving of an entire raft; or
- Flushing animals off a haulout.

This list does not encompass all possible behaviors that indicate Level B harassment; other behavioral responses may be indicative of take by Level B harassment. Relatively minor changes in behavior such as the animal raising its head or temporarily changing its 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 a take by Level B harassment. It is also important to note that eliciting behavioral responses that equate to take by Level B harassment repeatedly may result in Level A harassment.

Calculating Take

Sea Otter Density

We assumed all sea otters 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. We refer to the area in which sound levels meet or exceed the

acoustic exposure criteria defined for either Level A harassment or Level B harassment as the ensonification area. For each project, spatially explicit ensonification areas were established around the planned construction location to estimate the number of sea otters that may be exposed to these sound levels. For Seward, we determined the number of sea otters present in the ensonification areas using density information generated by Weitzman and Esslinger (2015). The density of sea otters (2.31 sea otters/km^2) was derived from surveys conducted of PWS (Weitzman and Esslinger 2015).

Recent estimates of the number of sea otters in the Sitka project area are less than 1 sea otter/km^2. Tinker et al. (2019) estimated an average of 0.85 sea otters/km^2 in the subregion that includes the project area (N05). Similarly, fine-scale ecological diffusion models have estimated 0.062 sea otters/km^2 inside the harbor breakwater and 0.65 sea otters/km^2 outside the harbor breakwater (Eisaguirre et al. 2021). We used the largest estimated sea otter density of 0.85 sea otters/km^2 to conservatively estimate the number of sea otters potentially affected by project activities at Sitka.

For project activities in Kodiak, we determined the number of sea otters present in the ensonification areas using a localized sea otter density estimate derived from sea otter observation data to account for potentially large sea otter groups. Increased numbers of sea otters were observed in Womens Bay, where project activities in Kodiak would occur, during the most recent sea otter abundance survey of the Kodiak Archipelago in 2014 (Cobb 2018). Additionally, large group sizes of up to 159 sea otters were observed in Womens Bay (Cobb 2018).

To account for the potential presence of large sea otter groups in the Kodiak project area, we determined the number of sea otters expected to be present in the Kodiak project area by analyzing sea otter observation data collected during a dock improvement project at the Kodiak Ferry Terminal from November 2015 to June 2016 (ABR 2016). The Kodiak Ferry Terminal project area is approximately 8 km (5 mi) from the Kodiak project area. Observers monitored for marine mammals at various periods throughout the day, and some days had multiple observers at

different observation stations. Marine mammals were monitored for 110 days, and sea otters were observed on 100 days. We calculated a daily sea otter count at each observation station for each observation day by summing the maximum sea otter group size for each observation recorded within a given day at that station. Maximum group size ranged from 0 to 218 sea otters. Daily sea otter counts ranged from 0 to 423 sea otters.

To obtain consistent and comparable measures for each observation station, we calculated the total area in which sea otters were observed by drawing a minimum convex polygon around the spatial extent of all sea otter locations observed at an observation station. The daily sea otter counts were then divided by the respective total area of observation for the station at which it was observed, resulting in a measure of sea otters per square kilometer. This resulting density will be biased higher than actual densities because the actual observed area is larger than the minimum convex polygon around the observed sea otter locations, but this conservative assumption will avoid underestimating potential disturbance to sea otters during project activities. On days with observations conducted at multiple observation stations, we calculated the average sea otter density for those observation stations to get a single sea otter density on that day. We averaged all daily sea otter densities to obtain 51.81 sea otters/km^2 per day to represent the average number of sea otters anticipated in the Kodiak project area.

Sound Levels for the Specified Activities

The project activities at each of the three locations consist of multiple possible methods of pile removal (vibratory pile extraction, pile clipping, and use of a diamond wire saw, hydraulic chain saw or hydraulic shearing device) and multiple methods of pile installation (DTH rock socket drilling, vibratory pile settling, and impact pile proofing). Each of these methods will generate a different type of in-water noise. Vibratory pile extraction and settling, pile clipping, and use of a diamond wire saw, hydraulic chain saw, or hydraulic shearing device will produce nonimpulsive or continuous noise; impact pile proofing will produce impulsive

noise; and rock socket 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 in addition to guidance from NMFS. We used the empirical data from those proxy projects and sound levels provided by NMFS 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 4). To estimate the distances at which sounds would attenuate to Level B harassment thresholds (table 4), we used the data from the proxy projects and the sound levels provided by NMFS with 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. The weighting factor adjustment included in the NMFS user spreadsheet accounts for sounds created in portions of an animal'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. The spreadsheet also incorporates a transmission loss coefficient, which accounts for the reduction in sound level outward from a sound source.

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) SPL as it is more conservative than SEL_{CUM} or peak SPL for these activities. Impulsive sound sources are in the form of SEL for a single strike (SELss). Sound levels for project activities in Seward, Sitka, and Kodiak are listed in tables 6, 7, and 8, respectively.

Table 6—USCG Moorings Seward: Project Activities; Sound Types, Levels, and Timing

Project component	Pile size and material	Activity	Type of sound	Sound levels	Source	Timing per pile (nonimpulsive sound sources) or strikes per pile (impulsive sound sources)
FRC Moorings	<40.6-cm (<16-in) steel	Removal–vibratory	Nonimpulsive	160 dB RMS	89 FR 60359	30 minutes
		Removal–pile clipper		161.2 dB RMS	NAVFAC[a] SW 2020	10.4 minutes

		Removal–diamond wire saw		161.5 dB RMS	NAVFAC[a] SW 2020	15.5 minutes
	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	Both impulsive and nonimpulsive	174 dB RMS; 164 dB SELss; 194 dB peak	NMFS 2022	180 minutes/ 108,000 strikes
		Installation–vibratory settling	Nonimpulsive	163 dB RMS	NAVFAC[a] SW 2020	10 minutes
		Installation–impact proofing	Impulsive	186 dB RMS: 173 dB SELss; 198 dB peak	89 FR 60359	5 strikes
New Dock	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	Both impulsive and nonimpulsive	174 dB RMS; 164 dB SELss; 194 dB peak	NMFS 2022	180 minutes/ 108,000 strikes
		Installation–vibratory settling	Nonimpulsive	163 dB RMS	NAVFAC[a] SW 2020	10 minutes
		Installation–impact proofing	Impulsive	186 dB RMS: 173 dB SELss; 198 dB peak	89 FR 60359	5 strikes

[a] Naval Facilities Engineering Command

Table 7—USCG Moorings Sitka: Project Activities; Sound Types, Levels, and Timing

Project component	Pile size and material	Activity	Type of sound	Sound levels	Source	Timing per pile (nonimpulsive sound sources) or strikes per pile (impulsive sound sources)
Demolition	76.2-cm (30-in) concrete	Removal–vibratory	Nonimpulsive	162 dB RMS	Caltrans 2020	30 minutes
		Removal–pile clipper		161.2 dB RMS	NAVFAC[a] SW 2020	10.4 minutes
		Removal–diamond wire saw		161.5 dB RMS	NAVFAC[a] SW 2020	15.5 minutes
	35.6-cm (14-in) timber	Removal–vibratory	Nonimpulsive	160 dB RMS	Greenbusch 2018	10 minutes
Construction	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	Both impulsive and nonimpulsive	174 dB RMS; 164 dB SELss; 194 dB peak	NMFS 2022	180 minutes/ 108,000 strikes
		Installation–vibratory settling	Nonimpulsive	163 dB RMS	NAVFAC[a] SW 2020	10 minutes
		Installation–impact proofing	Impulsive	186 dB RMS; 173 dB SELss; 198 dB peak	89 FR 60359	5 strikes
Construction	35.6-cm (14-in) timber	Installation–impact driving	Impulsive	170 dB RMS; 164 dB SELss	Caltrans 2020	100 strikes
Construction	33.0-cm (13-in) composite	Installation–impact driving	Impulsive	153 dB RMS; 162 dB SELss	Caltrans 2020	160 strikes

[a] Naval Facilities Engineering Command

Table 8—USCG Base Kodiak: Project Activities; Sound Types, Levels, and Timing

Project component	Year	Pile size and material	Activity	Type of sound	Sound levels	Source	Timing per pile (nonimpulsive sound sources) or strikes per pile (impulsive sound sources)
Demolition	1	35.6-cm (14-in) timber	Removal–vibratory	Nonimpulsive	160 dB RMS	Greenbusch 2018	10 minutes
		61.0-cm (24-in) timber			160 dB RMS	Greenbusch 2018	10 minutes

		30.5-cm (12-in) steel			155 dB RMS	CalTrans 2015	10 minutes
		35.6-cm (14-in) steel			154 dB RMS	CalTrans 2020	10 minutes
Construction		61.0-cm (24-in) steel	Installation–vibratory	Nonimpulsive	153 dB RMS	CalTrans 2020	20 minutes
			Installation–impact	Impulsive	190 dB RMS; 177 dB SELss; 203 dB peak	CalTrans 2015	1,800 strikes
			Installation–DTH	Impulsive and nonimpulsive	167 dB RMS; 159 dB SELss; 184 dB peak	Heyvaert & Reyff 2021	150 minutes/ 90,000 strikes
		76.2-cm (30-in) vibroflot columns	Installation–vibratory	Nonimpulsive	159 dB RMS	CalTrans 2020	45 minutes
		91.4-cm (36-in) steel	Temporary installation–vibratory	Nonimpulsive	170 dB RMS	CalTrans 2015	20 minutes
			Temporary removal–vibratory		170 dB RMS	CalTrans 2015	20 minutes
		106.7-cm (42-in) steel	Installation–vibratory	Nonimpulsive	169 dB RMS	Reyff & Heyvaert 2019; NMFS 2024	20 minutes
			Installation–impact	Impulsive	192 dB RMS; 179 dB SELss; 213 dB peak	CalTrans 2020	2,400 strikes
		61.0-cm (24-in) steel/concrete	Removal–vibratory	Nonimpulsive	163 dB RMS	NAVFAC SW[a] 2023	10 minutes
		61.0-cm (24-in) precast concrete reaction	Installation–vibratory	Nonimpulsive	163 dB RMS	NAVFAC SW[a] 2023	20 minutes
		61.0-cm (24-in) precast concrete fender	Installation–impact	Impulsive	176 dB RMS; 164 dB SELss; 195 dB peak	CalTrans 2020	2,400 strikes
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	Impulsive and nonimpulsive	174 dB RMS; 164 dB SELss; 194 dB peak	Denes et al. 2019; Reyff & Heyvaert 2019; Reyff 2020	150 minutes/ 90,000 strikes
	2	61.0-cm (24-in) steel	Installation–vibratory	Nonimpulsive	153 dB RMS	CalTrans 2020	20 minutes
			Installation–impact	Impulsive	190 dB RMS; 177 dB SELss; 203 dB peak	CalTrans 2015	1,800 strikes
			Installation–DTH	Impulsive and nonimpulsive	167 dB RMS; 159 dB SELss; 184 dB peak	Heyvaert & Reyff 2021	150 minutes/ 90,000 strikes
		76.2-cm (30-in) steel	Installation–vibratory	Nonimpulsive	159 dB RMS	CalTrans 2020	20 minutes
			Installation–impact	Impulsive	190 dB RMS; 177 dB SELss; 210 dB peak	CalTrans 2020	1,800 strikes
		91.4-cm (36-in) steel	Permanent installation–vibratory	Nonimpulsive	170 dB RMS	CalTrans 2015	20 minutes
			Permanent installation–impact	Impulsive	193 dB RMS; 183 dB SELss; 210 dB peak	CalTrans 2020	1,800 strikes
			Temporary installation–vibratory	Nonimpulsive	170 dB RMS	CalTrans 2015	20 minutes
			Temporary removal–vibratory		170 dB RMS	CalTrans 2015	20 minutes

		106.7-cm (42-in) steel	Installation–vibratory	Nonimpulsive	169 dB RMS	Reyff & Heyvaert 2019; NMFS 2024	20 minutes
			Installation–impact	Impulsive	192 dB RMS; 179 dB SELss; 213 dB peak	CalTrans 2020	2,400 strikes
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	Impulsive and nonimpulsive	174 dB RMS; 164 dB SELss; 194 dB peak	Denes et al. 2019; Reyff & Heyvaert 2019; Reyff 2020	150 minutes/ 90,000 strikes

[a] Naval Facilities Engineering Command Southwest

Ensonified Areas

Distances to below Level A harassment and Level B harassment thresholds were calculated for each project activity to determine the ensonified area for a given project activity. The USCG will implement shutdown zones to reduce harassment of sea otters by in-water noise and minimize the likelihood that sea otters are impacted by physical interactions with construction equipment and materials. These shutdown zones will encompass some of the Level A harassment and Level B harassment zones in all three project areas.

For project activities in Seward and Sitka, a minimum 30-m (98-ft) acoustic shutdown zone will be implemented, which will encompass most of the Level A harassment and Level B harassment zones. During rock socket DTH drilling, where Level A harassment zones are 75.8 m (249 ft), the applicant will implement an acoustic shutdown zone of 85 m (279 ft), which encompasses all of the Level A harassment zone and most of the Level B harassment zone for that activity in Seward and Sitka (tables 9 and 10, respectively). Observers will be stationed at multiple vantage points, some elevated, to increase detectability of sea otters at these distances.

Table 9—USCG Moorings Seward: Distances to Below Level A Harassment and Level B Harassment Zones and Proposed Acoustic Shutdown Zones*

Project component	Pile size and material	Activity	Distance to below Level A harassment threshold (m)	Distance to below Level B harassment threshold (m)	Distance to below acoustic shutdown zones (m)
FRC moorings	<40.6-cm (16-in) steel	Removal–vibratory	0.5	10.0	30.0
		Removal–pile clipper	0.3	12.0	30.0
		Removal–diamond wire saw	0.4	12.6	30.0
	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	75.8	85.8	85.0
		Installation–vibratory settling	0.2	15.9	30.0
		Installation–impact proofing	0.4	541.2	30.0

New dock	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	75.8	85.8	85.0
		Installation–vibratory settling	0.2	15.9	30.0
		Installation–impact proofing	0.4	541.2	30.0

* Work at the USCG's Moorings Seward is expected to be completed within 1 year.

Table 10—USCG Moorings Sitka: Distances to Below Level A Harassment and Level B Harassment Zones and Proposed Acoustic Shutdown Zones*

Project component	Pile size and material	Activity	Distance to below Level A harassment threshold (m)	Distance to below Level B harassment threshold (m)	Distance to below acoustic shutdown zones (m)
Demolition	76.2-cm (30-in) concrete	Removal–vibratory	0.6	13.6	30.0
		Removal–pile clipper	0.3	12.0	30.0
		Removal–diamond wire saw	0.4	12.6	30.0
	35.6-cm (14-in) timber	Removal–vibratory	0.6	10.0	30.0
Construction	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	75.8	85.8	85.0
		Installation–vibratory settling	0.2	15.9	30.0
		Installation–impact proofing	0.4	541.2	30.0
	35.6-cm (14-in) timber	Installation–impact driving	0.5	46.4	30.0
	33.0-cm (13-in) composite	Installation–impact driving	0.5	3.4	30.0

* Work at the USCG's Moorings Sitka is expected to be completed within 1 year.

For project activities in Kodiak, the USCG will implement a minimum 20-m (66-ft) physical interaction shutdown zone, regardless of predicted sound levels, to minimize the potential for physical impacts to sea otters. Additionally, this 20-m (66-ft) physical interaction shutdown zone would reduce the number of sea otters exposed to in-water noise levels that would attenuate to Level A harassment thresholds; however, some Level A harassment zones extend past the 20-m (66-ft) physical interaction shutdown zone (table 11).

Table 11—USCG Base Kodiak: Distances to Below Level A Harassment and Level B Harassment Zones and Proposed Physical Interaction Shutdown Zones

Project component	Year	Pile size and material	Activity	Distance to below Level A harassment threshold (m)	Distance to below Level B harassment threshold (m)	Distance to below physical interaction shutdown zone (m)
Demolition	1	35.6-cm (14-in) timber	Removal–vibratory	0.6	10.0	20.0
		61.0-cm (24-in) timber		0.6	10.0	20.0
		30.5-cm (12-in) steel		0.3	4.6	20.0
		35.6-cm (14-in) steel		0.2	4.0	20.0
Construction		61.0-cm (24-in) steel	Installation–vibratory	0.1	3.4	20.0
			Installation–impact	75.7	1,000.0	20.0
			Installation–DTH	31.2	29.3	20.0
		76.2-cm (30-in) vibroflot columns	Installation–vibratory	0.8	8.6	20.0

		91.4-cm (36-in) steel	Temporary installation–vibratory	1.8	46.4	20.0
			Temporary removal–vibratory	1.8	46.4	20.0
		106.7-cm (42-in) steel	Installation–vibratory	1.6	39.8	20.0
			Installation–impact	124.6	1,359.4	20.0
		61.0-cm (24-in) steel/concrete	Removal–vibratory	0.9	15.9	20.0
		61.0-cm (24-in) precast concrete reaction	Installation–vibratory	0.6	15.9	20.0
		61.0-cm (24-in) precast concrete fender	Installation–impact	21.8	204.0	20.0
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	67.1	85.8	20.0
	2	61.0-cm (24-in) steel	Installation–vibratory	0.1	3.4	20.0
			Installation–impact	75.7	1,000.0	20.0
			Installation–DTH	31.2	29.3	20.0
		76.2-cm (30-in) steel	Installation–vibratory	0.3	8.6	20.0
			Installation–impact	75.7	1,000.0	20.0
		91.4-cm (36-in) steel	Permanent installation–vibratory	1.4	46.4	20.0
			Permanent installation–impact	145.1	1,584.9	20.0
			Temporary installation–vibratory	1.8	46.4	20.0
			Temporary removal–vibratory	1.8	46.4	20.0
		106.7-cm (42-in) steel	Installation–vibratory	1.6	39.8	20.0
			Installation–impact	124.6	1,359.4	20.0
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	67.1	85.8	20.0

We subtracted the area of the respective shutdown zone from the area ensonified to >232 dB peak or >203 dB SEL_{CUM} re 1µPa for impulsive underwater sound and >219 dB SEL re 1µPa for nonimpulsive (continuous) underwater sound to determine the area in which sea otters may experience Level A harassment during the USCG's project activities. Next, we multiplied the remaining ensonified area for Level A harassment by the density of sea otters for each respective project area (see *Sea Otter Density*) to determine the number of sea otters that may experience Level A harassment.

To estimate the number of sea otters anticipated to experience Level B harassment during the USCG's project activities, we subtracted either the area of the Level A harassment zone or the area of the shutdown zone (whichever was greater) from the area ensonified to >160 dB re 1µPa to determine the area in which sea otters may experience Level B harassment. Next, we multiplied the remaining ensonified area for Level B harassment by the density of sea otters for each respective project area (see *Sea Otter Density*) to determine the number of sea otters that

may experience Level B harassment. For most of the in-water noise-generating activities in Seward and Sitka, we used the area of a circle (πr^2) to calculate the area ensonified, where the radii (r) are the distances to below the Level B harassment threshold (tables 9 and 10 for Seward and Sitka, respectively). The exception is the Level B harassment zone generated by impact proofing in Seward and Sitka; for that activity, the applicant provided geospatial files representing the area of ensonified water clipped by land boundaries. The number of sea otters expected to be exposed to such sound levels during project activities in Seward and Sitka can be found in tables 12 and 13, respectively.

Table 12—USCG Moorings Seward: Project Activities and Level B Harassment Events Anticipated*

Project component	Pile size and material	Activity	Maximum number of days of activity	Sea otter density	Level B area (km^2)	Shutdown zone area (km^2)	Level B area minus shutdown zone area (km^2)	Potential sea otters affected by Level B sound per day	Potential sea otters affected by Level B sound per day (rounded)	Total potential Level B harassment events
FRC moorings	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	20	2.31 sea otters/ km^2	0.02	0.02	0.00	0.00	0	0
		Installation–impact proofing			0.11	0.00	0.11	0.25	2[a]	40
New dock	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH			0.02	0.02	0.00	0.00	0	0
		Installation–impact proofing			0.11	0.00	0.11	0.25	2[a]	40

*Only activities with Level B harassment thresholds that are larger than the proposed shutdown zone are included in this table, since implementing shutdown zones larger than the Level B harassment thresholds will prevent all take.

[a] Potential sea otters affected by Level B sound rounded to 2 to account for mom/pup pairs.

Table 13—USCG Moorings Sitka: Project Activities and Level B Harassment Events Anticipated*

Project component	Pile size and material	Activity	Maximum number of days of activity	Sea otter density	Level B area (km^2)	Shutdown zone area (km^2)	Level B area minus shutdown zone area (km^2)	Potential sea otters affected by Level B sound per day	Potential sea otters affected by Level B sound per day (rounded)	Total potential Level B harassment events
Construction	76.2-cm (30-in) concrete or steel	Installation–rock socket DTH	84	0.85 sea otters/ km^2	0.02	0.02	0.00	0.00	0	0
		Installation–impact proofing			0.27	0.00	0.27	0.23	2[a]	168
	35.6-cm (14-in) timber	Installation–impact driving	3		0.007	0.00	0.007	0.006	2[a]	6

*Only activities with Level B harassment thresholds that are larger than the proposed shutdown zone are included in this table, since implementing shutdown zones larger than the Level B harassment thresholds will prevent all take.

[a] Potential sea otters affected by Level B sound rounded to 2 to account for mom/pup pairs.

For project activities in Kodiak, the applicant provided geospatial files representing the

area of the wharf and ensonified water around the wharf. These geospatial files were clipped by land boundaries; therefore, only the area of ensonified water was provided by the applicant. The number of sea otters expected to be exposed to such noise levels that would attenuate to Level A harassment and Level B harassment thresholds during project activities in Kodiak can be found in tables 14 and 15, respectively.

Table 14—USCG Base Kodiak: Project Activities and Level A Harassment Events Anticipated

Project component	Project year	Pile size and material	Activity	Maximum number of days of activity	Sea otter density	Level A area (km^2)	Level A area minus shutdown zone area (km^2)	Potential sea otters affected by Level A sound per day	Total potential Level A harassment events
Demolition	1	35.6-cm (14-in) timber	Removal–vibratory	10	51.81 sea otters / km^2	0.01	0	0	0
		61.0-cm (24-in) timber		2		0.01	0	0	0
		30.5-cm (12-in) steel		9		0.01	0	0	0
		35.6-cm (14-in) steel		2		0.01	0	0	0
Construction		61.0-cm (24-in) steel	Installation–vibratory	5		0.01	0	0	0
			Installation–impact	5		0.08	0.05	2.82	14.12
			Installation–DTH	7		0.04	0.01	0.55	3.87
		76.2-cm (30-in) vibroflot columns	Installation–vibratory	59		0.01	0	0	0
		91.4-cm (36-in) steel	Temporary installation–vibratory	19		0.01	0	0	0
			Temporary removal–vibratory	19		0.01	0	0	0
		106.7-cm (42-in) steel	Installation–vibratory	32		0.01	0	0	0
			Installation–impact	32		0.14	0.11	5.64	180.54
		61.0-cm (24-in) steel/concrete	Removal–vibratory	1		0.01	0	0	0
		61.0-cm (24-in) precast concrete reaction	Installation–vibratory	7		0.01	0	0	0
		61.0-cm (24-in) precast concrete fender	Installation–impact	7		0.03	<0.01	0.09	0.62
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	48		0.07	0.05	2.40	115.04
	2	61.0-cm (24-in) steel	Installation–vibratory	4		0.01	0	0	0
			Installation–impact	4		0.08	0.05	2.82	11.30

			Installation–DTH	6		0.04	0.01	0.55	3.31
		76.2-cm (30-in) steel	Installation–vibratory	5		0.01	0	0	0
			Installation–impact	5		0.08	0.05	2.82	14.12
		91.4-cm (36-in) steel	Permanent installation–vibratory	3		0.01	0	0	0
			Permanent installation–impact	3		0.16	0.13	6.94	20.83
			Temporary installation–vibratory	9		0.01	0	0	0
			Temporary removal–vibratory	9		0.01	0	0	0
		106.7-cm (42-in) steel	Installation–vibratory	5		0.01	0	0	0
			Installation–impact	5		0.14	0.11	5.64	28.21
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	17		0.07	0.05	2.40	40.74

Table 15—USCG Base Kodiak: Project Activities and Level B Harassment Events Anticipated

Project component	Year	Pile size and material	Activity	Maximum number of days of activity	Sea otter density	Level B area (km^2)	Level B area minus Level A/ shutdown zone area (km^2)	Potential sea otters affected by Level B sound per day	Total potential Level B harassment events
Demolition	1	35.6-cm (14-in) timber	Removal–vibratory	10	51.81 sea otters/ km^2	0.02	0	0	0
		61.0-cm (24-in) timber		2		0.02	0	0	0
		30.5-cm (12-in) steel		9		0.01	0	0	0
		35.6-cm (14-in) steel		2		0.01	0	0	0
Construction		61.0-cm (24-in) steel	Installation–vibratory	5		0.01	0	0	0
			Installation–impact	5		1.30	1.22	63.25	316.25
			Installation–DTH	7		0.03	0	0	0
		76.2-cm (30-in) vibroflot columns	Installation–vibratory	59		0.02	0	0	0
		91.4-cm (36-in) steel	Temporary installation–vibratory	19		0.05	0.03	1.31	24.80
			Temporary removal–vibratory	19		0.05	0.03	1.31	24.80
		106.7-cm (42-in) steel	Installation–vibratory	32		0.04	0.02	0.97	31.06
			Installation–impact	32		1.59	1.45	75.17	2,405.55

		61.0-cm (24-in) steel/ concrete	Removal–vibratory	1		0.02	0	0	0
		61.0-cm (24-in) precast concrete reaction	Installation–vibratory	7		0.02	0	0	0
		61.0-cm (24-in) precast concrete fender	Installation–impact	7		0.24	0.21	11.05	77.38
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	48		0.09	0.02	0.98	46.88
	2	61.0-cm (24-in) steel	Installation–vibratory	4		0.01	0	0	0
			Installation–impact	4		1.30	1.22	63.25	253.00
			Installation–DTH	6		0.03	0	0	0
		76.2-cm (30-in) steel	Installation–vibratory	5		0.02	0	0	0
			Installation–impact	5		1.30	1.22	63.25	316.25
		91.4-cm (36-in) steel	Permanent installation–vibratory	3		0.05	0.03	1.31	3.92
			Permanent installation–impact	3		1.77	1.61	83.52	250.57
			Temporary installation–vibratory	9		0.05	0.03	1.31	11.75
			Temporary removal–vibratory	9		0.05	0.03	1.31	11.75
		106.7-cm (42-in) steel	Installation–vibratory	5		0.04	0.02	0.97	4.85
			Installation–impact	5		1.59	1.45	75.17	375.87
		63.5–106.7-cm (25–42-in) steel	Installation–DTH	17		0.09	0.02	0.98	16.60

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 1 type of activity will take place, which would reduce the number of days of exposure, we cannot know this information in advance. As such, the estimated number of days is the maximum possible for the planned work. Where the number of exposures expected per day was 0 to 3 or more decimal places (i.e., <0.00X), the number of exposures per day was assumed to be 0.

Where the number of exposures expected per day would have been rounded to 1, we rounded to 2 instead to accommodate potential mom and pup pairs of sea otters for project activities in Seward and Sitka. For project activities in Kodiak, we rounded the total estimated Level A harassment events and Level B harassment events across all activities per year up to the nearest whole number.

Critical Assumptions

In order to conduct this analysis and estimate the likely number of takes by Level A harassment and Level B harassment, several critical assumptions were made.

Level B harassment is equated herein with behavioral responses that indicate harassment or disturbance. There is likely a portion of animals that respond in ways that indicate some level of disturbance but do not experience biologically significant consequences. Our estimates do not account for variable responses by sea otter age and sex.

The estimates of behavioral response presented here do not account for the individual movements of animals in response to the specified activities. Our assessment assumes animals remain stationary (i.e., density does not change) for a 24-hour period, and animals do not move out of ensonified areas in response to noise. Not enough information is available about the movement of sea otters in response to specific disturbances to refine this assumption.

Sound level information from pile-driving activities in a number of locations was used to generate sound level estimates for the specified activities (see sources in tables 6, 7, and 8). Environmental conditions in these locations, including water depth, substrate, and ambient sound levels may be similar to those in the project location, but are not identical. Further, estimation of ensonification areas 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.

The pile-driving activities described here will also create in-air noise. Because sea otters spend over half of their day with their heads above water (Esslinger et al. 2014), they will be

exposed to increased in-air noise from construction equipment. However, we have calculated Level A harassment and Level B harassment with the assumption that a sea otter may be harassed only 1 time per 24-hour period, and in-water noise 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 in-water, we have relied on the more conservative in-water estimates.

Although sea otters are nonmigratory, they typically move amongst focal areas within their home ranges to rest and forage (Garshelis and Garshelis 1984; Laidre et al. 2009). It is possible that, given the large variability in individual home range sizes and the potential for up to daily movement in and out of foraging or resting areas, different individual sea otters could be found within the ensonification area each day of the project. Thus, the FWS conservatively assumes that the estimated harassment events may impact different sea otters for project activities at the USCG's Moorings Seward and Moorings Sitka. We estimate that 80 takes of 80 sea otters by Level B harassment may occur due to the USCG's planned activities in Seward and estimate that 174 takes of 174 sea otters by Level B harassment may occur due to the USCG's planned activities in Sitka. We used the sea otter density for the PWS area from surveys and analyses conducted by Weitzman and Esslinger (2015) to estimate the presence of sea otters at Seward. For Sitka, sea otter density was calculated using a state-space model created by Tinker et al. (2019) and a Bayesian hierarchical model created by Eisaguirre et al. (2021). Methods and assumptions for these surveys can be found in the original publications.

For project activities in Kodiak, we used sea otter observation data collected during the Kodiak Ferry Terminal project to estimate the average number of sea otters expected to be present in the Kodiak project area. These data were collected by ABR, Inc., and methods and assumptions for this dataset can be found in the original report (ABR 2016). We assumed that sea otter distribution and behavior observed during the dock improvement project at the Kodiak Ferry Terminal would be similar to sea otter distribution and behavior in the Kodiak project area. The Kodiak Ferry Terminal project activities included impact pile driving, vibratory pile driving,

and DTH drilling, which are similar to the project activities in Kodiak. Both project areas are located in developed areas where sea otters are exposed to human activities. Also, sea otters in both project areas may experience similar environmental conditions considering the project areas are approximately 8 km (5 mi) from each other and protected by land. We calculated a maximum daily sea otter count of 423 sea otters during the Kodiak Ferry Terminal dock improvement project. Therefore, we estimated that a maximum of 423 sea otters may be exposed to in-water noise during the USCG's project activities in Kodiak. To obtain the average number of sea otters expected to be present in the Kodiak project area, we divided the daily sea otter counts by the respective total area of observation for the station at which sea otters were observed. The total area of observation for each station is represented as the minimum convex polygon around the spatial extent of all sea otter locations observed at that station. The actual observed area for each station is likely larger than the minimum convex polygon around the observed sea otter locations, which would result in the estimated sea otter density being biased higher than the actual sea otter density. However, this conservative assumption avoids underestimating potential disturbance to sea otters during project activities.

Sum of Harassment from All Sources

The USCG will conduct pile driving and marine construction activities in Seward, Sitka, and Kodiak within the 5-year ITR period. A summary of total numbers of estimated takes by Level A harassment and Level B harassment by project location, year, and 5-year duration of the proposed ITR is provided in table 16.

Table 16—Proposed ITR: Sea Otters Expected To Be Harassed; Level A Harassment and Level B Harassment Events

Location	Number of sea otters exposed to Level A harassment (single year)	Number of Level A harassment events (single year)	Total number of Level A harassment events (5 years)	Number of sea otters exposed to Level B harassment (single year)	Number of Level B harassment events (single year)	Total number of Level B harassment events (5 years)
Seward (Southcentral AK stock)	0	0	0	80	80	80*
Sitka (Southeast AK stock)	0	0	0	174	174	174*

Kodiak (Southwest AK stock)	423	433	433	423	4,172	4,172

* Work at the USCG's Moorings Seward and Moorings Sitka is expected to be completed within 1 year.

In a single year, we estimate up to 80 instances of take by Level B harassment of 80 northern sea otters from the Southcentral Alaska stock due to behavioral responses and/or TTS associated with noise exposure during project activities in Seward. In a single year, we estimate up to 174 instances of take by Level B harassment of 174 northern sea otters from the Southeast Alaska stock due to behavioral responses and/or TTS associated with noise exposure during project activities in Sitka. Although multiple instances of Level B harassment of individual sea otters are possible, these events are unlikely to have significant consequences for the health, reproduction, or survival of affected animals. The potential effects of multiple Level B harassment noise exposures may include short-term behavioral reactions, displacement of sea otters near active operations, and potential temporary shifts in hearing thresholds. Considering the specified activities would occur during a limited amount of time over non-consecutive days and in a localized area, we do not anticipate that the effects of multiple Level B harassment noise exposures would rise to the level of an injury or Level A harassment. Take by Level A harassment of sea otters is not anticipated, nor was it requested by the applicant, for project activities in Seward and Sitka. While the project activities in Seward and Sitka will create sound levels above Level A harassment thresholds, the use of acoustic shutdown zones of 85 m (279 ft) for DTH drilling and 30 m (98 ft) for all other activities are expected to preclude Level A harassment events from occurring during these specified activities. The PSOs will be stationed at multiple vantage points, some elevated, to increase the distances at which sea otters can be reliably detected.

In a single year, we estimate up to 433 instances of take by Level A harassment of 423 northern sea otters from the Southwest Alaska stock due to PTS associated with noise exposure during project activities in Kodiak. The use of soft-start procedures, zone clearance prior to activity startup, and shutdown zones is likely to decrease both the number of sea otters exposed

to noise above Level A harassment thresholds and the exposure time of any sea otters entering the Level A harassment zone. This reduces the likelihood of losses of hearing sensitivity that might impact the health, reproduction, or survival of affected sea otters. Despite the implementation of mitigation measures, it is anticipated that some sea otters will experience Level A harassment via exposure to in-water noise above threshold criteria during impact and DTH pile-driving activities. Due to sea otters' small body size and low profile in the water, we anticipate that sea otters will at times avoid detection before entering Level A harassment zones for those activities. We anticipate that PSOs at Kodiak will be able to reliably detect and prevent take by Level A harassment of sea otters by monitoring the physical interaction shutdown zone (20 m [66 ft]); conversely, we anticipate that at distances greater than the physical interaction shutdown zone, sea otters will at times avoid detection.

In a single year, we estimate up to 4,172 instances of take by Level B harassment of 423 northern sea otters from the Southwest Alaska stock due to behavioral responses and/or TTS associated with noise exposure during project activities in Kodiak. Although multiple instances of Level B harassment of individual sea otters are possible, these events are unlikely to have significant consequences for the health, reproduction, or survival of affected sea otters. The potential effects of multiple Level B harassment noise exposures may include short-term behavioral reactions, displacement of sea otters near active operations, and potential temporary shifts in hearing thresholds. Considering the specified activities would occur during a limited amount of time over non-consecutive days and in a localized area, we do not anticipate that the effects of multiple Level B harassment noise exposures would rise to the level of an injury or Level A harassment.

Determinations and Findings

Sea otters exposed to noise 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. The activities will occur during a

limited amount of time and in a localized area, and the impacts associated with the project are likewise temporary and localized. The anticipated effects are short-term behavioral reactions, displacement of sea otters near active operations, and potential temporary and permanent shifts in hearing thresholds.

Sea otters that encounter the specified activities may exert more energy than they would otherwise due to temporary cessation of feeding, increased vigilance (e.g., repeatedly spyhopping), 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 the USCG's requests will reduce occurrences of Level A harassment to the extent practicable, a small number of takes by Level A harassment would be authorized for impact pile driving and DTH drilling activities in Kodiak, which have Level A harassment zone radii ranging in size from 21.8 to 145.1 m (71.5 to 476.0 ft).

With the adoption of the acoustic shutdown zones and physical interaction shutdown zones incorporated in the USCG's requests and required by this proposed ITR, anticipated take was reduced in our take estimate analysis. Those mitigation measures are further described below. We prescribe additional mitigation measures that would further limit the potential impacts of the USCG's activities on sea otters.

Small Numbers

For our small numbers determination, we consider whether the estimated number of sea otters to be subjected to incidental take is small relative to the population size of the species or stock. More specifically, the FWS compares the number of sea otters anticipated to be taken in each year contemplated by the proposed ITR with the population estimate applicable to each of those years. Here, predicted numbers of sea otters to be taken were determined based on the estimated density of sea otters in the project area and ensonification areas developed using

empirical evidence from similar geographic areas. We estimate that the USCG's projects may annually result in the incidental take of approximately:

- No more than 80 Southcentral Alaska stock northern sea otters by Level B harassment annually and over the duration of this proposed ITR (see *Sum of Harassment from All Sources*). Annual take of 80 sea otters is 0.37 percent of the best available estimate of the current annual Southcentral Alaska stock size of 21,617 animals (Esslinger et al. 2021; 88 FR 53510, August 8, 2023) ((80÷21,617)×100≈0.37) and represents a "small number" of sea otters of that stock.
- No more than 174 Southeast Alaska stock northern sea otters by Level B harassment annually and over the duration of this proposed ITR (see *Sum of Harassment from All Sources*). Annual take of 174 sea otters is 0.78 percent of the best available estimate of the current annual Southeast Alaska stock size of 22,359 animals (88 FR 53510, August 8, 2023) ((174÷22,359)×100≈0.78) and represents a "small number" of sea otters of that stock.
- No more than 423 Southwest Alaska stock northern sea otters by Level A harassment and Level B harassment annually and over the duration of this proposed ITR (see *Sum of Take from All Sources*). Annual take of 423 sea otters is 0.81 percent of the best available estimate of the current annual Southwest Alaska stock size of 51,935 animals (88 FR 53510, August 8, 2023) ((423÷51,935)×100≈0.81) and represents a "small number" of sea otters of that stock.

Within the specified geographic region, the area of specified activity is expected to be small relative to the range of sea otters. Sea otters range well beyond the boundaries of the specified geographic region. As such, the specified geographic region itself represents only a subset of the potential area in which this species may occur, and we anticipate that only a small proportion of sea otters would be present within the vicinity of the specified activities.

Therefore, we propose a finding that the USCG's specified activities will take only small numbers of sea otters because: (1) Only a small proportion of sea otters will overlap with the areas where the specified activities will occur; (2) the estimated number of Southcentral Alaska stock northern sea otters to be taken will be limited to a total of 80 Southcentral Alaska stock

northern sea otters annually and over the duration of the proposed ITR; (3) the estimated number of Southeast Alaska stock northern sea otters to be taken will be limited to a total of 174 Southeast Alaska stock northern sea otters annually and over the duration of the proposed ITR; and (4) the estimated number of Southwest Alaska stock northern sea otters to be taken will be limited to a total of 423 Southwest Alaska stock northern sea otters annually and over the duration of the proposed ITR, which represents a small proportion of each stock of sea otters.

Negligible Impact

For our negligible impact determination, we consider the following:

1. The documented impacts of previous activities similar to the specified activities on sea otters, taking into consideration cumulative effects, suggests that the types of activities analyzed for this proposed ITR will have minimal effects limited to short-term, temporary behavioral changes, displacement of sea otters near active operations, and potential hearing threshold shifts. This is true not only for Level B harassment, but also Level A harassment. While Level A harassment has the potential to result in the injury of up to 423 sea otters at Kodiak during the ITR period, this type of harassment is not anticipated to result in long-term impacts that are likely to result in mortality. Most sea otters will respond to disturbance by moving away from the sound source, which may cause temporary interruption of foraging, resting, or other natural behaviors. Affected sea otters are expected to resume normal behaviors soon after exposure with no lasting consequences to their survival or reproduction. Sea otters may move in and out of the project area during pile-driving activities, leading to as many as 80 individuals in Seward, 174 individuals in Sitka, and 423 individuals in Kodiak experiencing exposure to noise at levels that may cause harassment. However, it is possible that an individual may enter the ensonification area more than once during the project. At most, if the same sea otter enters the ensonification area every day that pile driving occurs, the sea otter would be exposed to pile driving and marine construction noise for up to 22 non-consecutive days in Seward, 117 non-consecutive days in Sitka, and up to 339 non-consecutive days in Kodiak.

We do not anticipate that sea otters in Seward and Sitka will be exposed to noise levels equal to or greater than Level A harassment thresholds due to the applicant's implementation of acoustic shutdown zones larger than the Level A harassment zone. It is possible that sea otters in Kodiak may be exposed to noise levels equal to or greater than Level A harassment thresholds on multiple days throughout project activities. The potential effects of multiple Level A harassment noise exposures may include a greater reduction in a sea otter's hearing sensitivity if the sea otter is exposed to different sound levels that can cause PTS, but this reduction in hearing sensitivity does not equate to total hearing loss. The reduction in sea otter hearing sensitivity caused by PTS would align with the energy produced by pile-driving activities (e.g., low-frequency less than 2 kHz), which would not impair the majority of a sea otter's hearing range. Sea otters do not rely on sound to orient themselves, locate prey, or communicate under water. Therefore, we do not anticipate impacts to sea otters' ability to move, forage, or communicate as a result of PTS from multiple Level A harassment noise exposures. 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). However, we anticipate that a sea otter will retain the majority of its hearing range if it experiences PTS from multiple Level A harassment noise exposures and that impacts from PTS will not have long-term consequences to a sea otter's survival and reproduction.

It is possible that sea otters will move away from Level A harassment zones to avoid experiencing PTS. The area that will experience noise levels equal to or greater than Level A harassment thresholds due to pile driving is small (approximately 0.13 km^2), and a sea otter that may be disturbed could escape the noise by moving to nearby quiet areas. 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, their ears will not be exposed to continuous noise, thereby reducing their likelihood to experience PTS. Some sea otters 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 result in measurable changes in survival or reproduction. Therefore, we anticipate the specified activities will not have lasting impacts that could significantly affect an individual's health, reproduction, or survival. The limited extent of anticipated impacts on sea otters is unlikely to adversely affect annual rates of sea otter survival or recruitment.

2. The proposed ITR, if finalized, would require implementation of monitoring requirements and mitigation measures that would limit the potential impacts of the USCG's operations on sea otters. Adaptive mitigation and management responses based on real-time monitoring of the project areas by PSOs (described in this proposed authorization) would be used to avoid or minimize interactions with sea otters and, therefore, limit potential disturbance of these animals.

3. The FWS does not anticipate any lethal take or long-term impacts that would remove individual sea otters from the population or prevent their successful reproduction. Incidental harassment events are anticipated to be limited to human interactions that lead to short-term behavioral disturbances, displacement of sea otters near active project operations, and potential temporary and permanent hearing threshold shifts. These disturbances would not affect the rates of recruitment or survival for the Southcentral Alaska, Southeast Alaska, and Southwest Alaska stocks of sea otters. This proposed ITR does not authorize take that will likely lead to mortality or lethal take.

We also consider the conjectural or speculative impacts associated with these specified activities. The specific congressional direction described below justifies balancing the probability of such impacts with their severity.

If potential effects of a specified activity are conjectural or speculative, a finding of negligible impact may be appropriate. A finding of negligible impact may also be appropriate if the probability of occurrence is low but the potential effects may be significant. In this case, the

probability of occurrence of impacts must be balanced with the potential severity of harm to the species or stock when determining negligible impact. In applying this balancing test, the FWS will thoroughly evaluate the risks involved and the potential impacts on marine mammal populations. Such determination will be made based on the best available scientific information (53 FR 8474, March 15, 1988; 132 Cong. Rec. S 16304-5 (October. 15, 1986)).

The potential effects of most concern here are the potential injury or PTS of sea otters in Kodiak resulting from exposure to noise levels equal to or greater than Level A harassment thresholds. The FWS does not anticipate lethal take of sea otters as a result of the USCG's in-water activities. As a result of our analyses presented in the proposed ITR, we estimate up to 433 takes by Level A harassment may occur annually and up to a total of 433 takes by Level A harassment may occur during project activities in Kodiak. While the FWS found that in-water noise will rise to a level that may cause PTS in the areas immediately adjacent to pile-driving activities, these noise levels will not extend farther than 145.1 m (476.0 ft) from the sound source.

The applicant will implement PSO-monitored physical interaction shutdown zones that will encompass the majority of the ensonified areas in which Level A harassment may occur in Kodiak, thus minimizing injurious take. Additionally, the use of soft-start procedures and zone clearance prior to activity startup is likely to decrease both the number of sea otters exposed to noise levels above Level A harassment thresholds and the exposure time of any sea otters entering the Level A harassment zone. These mitigation measures reduce the likelihood of losses of hearing sensitivity that might impact the health, reproduction, or survival of affected sea otters. A small number of takes by Level A harassment would be authorized for impact pile driving and DTH drilling activities that have Level A harassment zone radii ranging in size from 21.8 to 145.1 m (71.5 to 476.0 ft), but mitigation measures would be implemented to minimize take by Level A harassment to the extent possible.

Despite the implementation of mitigation measures, it is anticipated that some sea otters in Kodiak will experience Level A harassment via exposure to in-water noise above threshold criteria during impact pile driving and DTH drilling activities. Due to sea otters' small body size and low profile in the water, as well as the size of the Level A harassment zones associated with these activities, we anticipate that sea otters will at times not be detected prior to entering Level A harassment zones for those activities. We anticipate that PSOs at Kodiak will be able to reliably detect and prevent take by Level A harassment of sea otters up to the physical interaction shutdown zone (20 m [66 ft]); conversely, we anticipate that at distances greater than the physical interaction shutdown zone, sea otters will at times be undetectable. If any sea otters exposed to noise levels above Level A harassment threshold criteria do experience PTS in the sensitivity of their hearing, it does not equate to total hearing loss. We do not anticipate that a reduction in hearing sensitivity would significantly affect a sea otter's health, reproduction, or survival or otherwise cause any population-level effects. Therefore, the FWS does not anticipate that the conjectural or speculative impacts associated with these specified activities warrant a finding of non-negligible impact or otherwise preclude issuance of this proposed ITR.

We reviewed the effects of the specified pile driving and marine construction activities on sea otters, including impacts from pile clipping, use of a wire saw, and vibratory pile driving, impact pile driving, and DTH drilling. Based on our review of these potential impacts, past monitoring reports, and the biology and natural history of sea otters, we anticipate that such effects will be limited to short-term behavioral disturbances, displacement of sea otters near active project operations, and potential temporary and permanent hearing threshold shifts.

We have evaluated the potential effects of climate change on sea otters as part of the environmental baseline. Climate change is a global phenomenon and was considered as a potential factor that could alter sea otter habitat and behavior. As we gain a better understanding of climate change effects, we will incorporate the information in future authorizations.

We preliminarily find that the impacts of these specified activities cannot be reasonably expected to, and are not reasonably likely to, adversely affect Southcentral Alaska, Southeast Alaska, or Southwest Alaska stocks of sea otters through effects on annual rates of recruitment or survival. We therefore propose a finding that the total of the taking estimated above and authorized pursuant to a final ITR will have a negligible impact on Southcentral Alaska, Southeast Alaska, and Southwest Alaska stocks of sea otters. The FWS does not propose to authorize take that will likely lead to mortality or lethal take of sea otters, and we do not anticipate that any such take will occur.

Least Practicable Adverse Impacts

We evaluated the practicability and effectiveness of mitigation measures based on the nature, scope, and timing of the specified activities; the best available scientific information; and monitoring data from similar pile driving and marine construction activities. After reviewing the original Requests (submitted January 19, 2024, for Seward and Sitka and March 5, 2024, for Kodiak), the FWS discussed additional mitigation measures with the USCG to reduce the potential impacts of the specified activities. These additional mitigation measures included adding more information to the USCG's descriptions of underwater pile cutting operations, vessel activities, and in-water sound levels associated with project support operations (e.g., use of noise-producing hand tools and heavy equipment), deploying noise-dampening materials (e.g., pile caps or cushions) between the pile and hammer during pile-driving activities, and revising sea otter monitoring and shutdown zones. The applicant incorporated these additional mitigation measures in their revised Requests and supporting documentation (WSP Environment and Infrastructure 2024 Request; Weston Solutions 2024 Request). We propose a finding that the mitigation measures included within the Requests will ensure the least practicable adverse impacts on sea otters.

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 manner and degree to which the successful implementation of the measures is expected to achieve this goal. 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).

To reduce the potential for disturbance from acoustic stimuli associated with the activities, the applicant has proposed mitigation measures, including the following:

- Using pile caps made of high-density polyethylene or ultra-high-molecular-weight polyethylene softening materials during impact pile driving;
- Conducting activities that may produce in-water noise during lower tidal conditions as possible to reduce transmission of sound into the water column;
- Using silt curtains or other containment methods to reduce sedimentation and turbidity when conducting DTH drilling and vibroflot column installation;
- Development of marine mammal monitoring and mitigation plans;
- Visual mitigation monitoring by designated PSOs;
- Halting or delaying activity during environmental conditions that may hinder sea otter detection, such as darkness, adverse weather conditions, high sea states, and other times of limited visibility;
- Maintaining the maximum distance practicable between a vessel and raft of sea otters;
- Operating vessels in such a way as to avoid approaching sea otters or impeding sea otter movements when traveling near the shoreline in shallow water (<20 m [66 ft]) whenever practicable;
- Establishment of shutdown and monitoring zones;
- Site clearance before activity startup;
- Soft-start procedures; and

- Shutdown procedures.

A number of additional potential mitigation measures were considered but determined to be not practicable. These measures are listed below:

- *Require use of bubble curtains*—At the time of publication of this proposed ITR, the applicant indicated that they were unable to find a contractor with access to bubble curtain equipment for project activities in Seward and Sitka. The applicant indicated that bubble curtains would likely increase turbidity in the Kodiak project area, which may impact water quality and marine life including sea otter prey species. The FWS determined the required use of bubble curtains was not practicable because bubble curtains are impossible to undertake for project activities in Seward and Sitka and bubble curtains would not be effective in reducing the impacts to sea otters during project activities in Kodiak.
- *Require use of other noise-dampening methods*—The FWS determined the required use of other noise-dampening methods, such as cofferdams, pile-surrounding casings, sound mitigation screens, and nets around piles, was not practicable because these methods were impossible to undertake considering the number of piles being removed or installed and the close proximity of piles to each other for project activities in each of the three locations.
- *Require use of alternate detection methods*—The FWS determined that the required use of alternate detection methods, such as infrared sensors, thermal imaging, or surveys conducted by aircraft, unmanned aircraft system (UAS), or vessel, was not practicable considering that these alternate detection methods would not be as effective in reducing impacts to sea otters and the applicant would employ PSOs to monitor the project area for sea otters.
- *Require 500-m minimum distance between vessels and sea otter rafts*—The FWS determined that vessels maintaining a minimum distance of 500 m (1,640 ft) from a raft of sea otters was impossible to undertake considering the width of the project area in Kodiak is approximately 488 m (1,601 ft) wide or less, but the applicant agreed to vessels maintaining the maximum distance between the vessel and rafts of sea otters as practicable. The FWS determined

that requiring vessels to avoid traveling in nearshore shallow water (<20 m [<66 ft]) was impossible to undertake considering the project area in Kodiak is located on the shoreline in water less than 20 m (66 ft) deep, but the applicant agreed that vessels would avoid approaching or impeding sea otter movements when traveling near the shoreline in shallow water (<20 m [<66 ft]) whenever practicable.

Impact on Subsistence Use

The specified project will not preclude access to harvest areas or interfere with the availability of sea otters for harvest by Alaska Native Peoples. Additionally, the USCG facilities are located in developed areas and largely within areas where firearm use is prohibited. We therefore preliminarily find that the USCG's anticipated harassment will not have an unmitigable adverse impact on the availability of Southcentral Alaska, Southeast Alaska, or Southwest Alaska stocks of northern sea otters for subsistence uses by Alaska Native Peoples during the specified timeframe. In making this preliminary finding, we considered the timing and location of the specified activities and the timing and location of subsistence harvest activities in the area of the specified project.

The harvest of sea otters is important to Alaska Native Peoples in the communities surrounding Seward, Sitka, and Kodiak. The USCG will be required to contact subsistence communities that may be affected by the pile driving and marine construction activities to discuss potential conflicts caused by location, timing, and methods of the specified activities. The USCG must make reasonable efforts to ensure that activities do not interfere with subsistence hunting and that adverse effects on the availability of sea otters are minimized. No concerns have been voiced by the Alaska Native communities regarding the specified activities limiting availability of sea otters for subsistence uses. However, should such a concern be voiced, a POC, which identifies measures to minimize any adverse effects, will be implemented. The POC will ensure that the USCG will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses. This POC provides the procedures

addressing how the USCG will work with the affected Alaska Native communities and what actions will be taken to avoid interference with subsistence hunting of sea otters, as warranted.

The FWS has not received any reports and is not aware of information that indicates that sea otters are being or will be deterred from hunting areas or impacted in any way that diminishes their availability for subsistence use by the expected level of pile driving and marine construction activity. If there is evidence that these pile driving and marine construction activities are affecting the availability of sea otters for subsistence uses, we will reevaluate our findings regarding permissible limits of take and the measures required to ensure continued subsistence hunting opportunities.

Monitoring and Reporting

The purpose of monitoring requirements is to assess the effects of specified activities on sea otters; ensure that take is consistent with that anticipated in the small numbers, negligible impact, and subsistence use analyses; and detect any unanticipated effects on the species or stock. Monitoring plans document when and how sea otters are observed, the number of sea otters, and their behavior during the observation. This information allows the FWS to measure encounter rates, examine trends in sea otter activity and distribution in the project areas, and estimate the number of sea otters potentially affected by the specified activities. The USCG is required to report all observations of sea otters. To the extent possible, PSOs will record group size, age, sex, behavior, duration of observation, and closest approach to the project activity. Activities within the specified geographic region may incorporate daily watch logs as well.

The FWS will provide the USCG with the most recent and up-to-date Sea Otter Observation Form in which to record observations of sea otters. Observations must be reported to the FWS's Marine Mammals Management Office within 48 hours of the observation and submitted to *fw7_mmm_reports@fws.gov*. Details on monitoring guidelines and reporting requirements can be read below in the rule portion of this document in proposed § 18.108 Monitoring and § 18.109 Reporting requirements.

Request for Public Comments

If you wish to comment on these proposed regulations or the associated draft environmental assessment, you may submit your comments by any of the methods described in **ADDRESSES**. Please identify if you are commenting on the proposed regulations, the draft environmental assessment, or both, make your comments as specific as possible, confine them to issues pertinent to the proposed regulations, 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 by the close of the comment period (see **DATES**).

Required Determinations

Clarity of the Proposed Rule

We are required by Executive Orders (E.O.s) 12866 and 12988 and by the Presidential memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(1) Be logically organized;

(2) Use the active voice to address readers directly;

(3) Use clear language rather than jargon;

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We have prepared a draft environmental assessment in accordance with the criteria of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.), the Department of the Interior regulations on Implementation of the National Environmental Policy Act (43 CFR 46.10-46.450), and the Department of the Interior Manual (516 DM 8). We have preliminarily concluded that the proposed action of issuing a final ITR would not significantly affect the quality of the human environment, and, thus, preparation of an environmental impact statement for this incidental take regulation, if finalized, 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 of 1973 (16 U.S.C. 1531 et seq.)

Under the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 et seq.), 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. Prior to issuance of a final ITR, if warranted, the FWS will complete intra-service consultation under section 7 of the ESA. These evaluations and findings would be made available on the FWS's website at https://ecos.fws.gov/ecp/report/biological-opinion.

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 organizations 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 Natives. 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 (E.O.) 13175* (January 9, 2000);

(4) *Department of the Interior Secretary's Orders 3206* (June 5, 1997), *3225* (January 19, 2001), *3317* (December 1, 2011), *3342* (October 21, 2016), and *3403* (November 15, 2021), including *Director's Order 227* (September 8, 2022);

(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. Through the ITR process identified in the MMPA, the applicant has presented a communication process, culminating in a POC if needed, with the Alaska Native organizations and communities most likely to be affected by their work. The FWS does not anticipate impacts to Alaska Native Tribes or Alaska Native Claims Settlement Act corporations and does not anticipate requesting consultation; however, we invite continued discussion, either about the project and its impacts or about our coordination and information exchange throughout the ITR/POC process.

Regulatory Planning and Review—E.O.s 12866 and 13563

E.O. 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB) will review all significant rules. OIRA has determined that this proposed rule is not significant.

OIRA bases its determination of significance upon the following four criteria: (a) Whether the rule will have an annual effect of $200 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government; (b) whether the rule will create inconsistencies with other Federal agencies' actions; (c) whether

the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients; (d) whether the rule raises novel legal or policy issues.

Expenses will be related to, but not necessarily limited to: the development of requests for LOAs; monitoring, recordkeeping, and reporting activities conducted during pile driving and marine construction; development of activity- and species-specific marine mammal monitoring and mitigation plans; and coordination with Alaska Natives to minimize effects of operations on subsistence hunting. Realistically, costs of compliance with this proposed rule, if finalized, are minimal in comparison to those related to actual pile driving and marine construction. The actual costs to develop the petition for promulgation of regulations and LOA requests do not exceed $200,000 per year, short of the "major rule" threshold that would require preparation of a regulatory impact analysis.

E.O. 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the Nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. E.O. 13563 directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements.

Small Business Regulatory Enforcement Fairness Act

We have determined that this proposed rule, if finalized, is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. The proposed rule is also not likely to result in a major increase in costs or prices for consumers, individual industries, or government agencies or have significant adverse effects on competition, employment,

productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

We have determined that this proposed rule, if finalized, will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). The USCG and their contractors conducting pile driving and marine construction in Kodiak, Sitka, and Seward, are the only entities subject to this proposed ITR. Therefore, neither a regulatory flexibility analysis nor a small entity compliance guide is required.

Takings (E.O. 12630)

This proposed rule, if finalized, does not have takings implications under E.O. 12630 because it authorizes the nonlethal, incidental, but not intentional, take of sea otters by pile driving and marine construction activities and, thereby, exempts the USCG from civil and criminal liability as long as they operate in compliance with the terms of their LOAs. Therefore, a takings implications assessment is not required.

Federalism (E.O. 13132)

This proposed rule, if finalized, does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under E.O. 13132. The MMPA gives the FWS the authority and responsibility to protect sea otters.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), this proposed rule, if finalized, will not "significantly or uniquely" affect small governments. A small government agency plan is not required. The FWS has determined and certifies pursuant to the Unfunded Mandates Reform Act that this rulemaking will not impose a cost of $100 million or more in any given year on local or State governments or private entities. This rule, if finalized,

will not produce a Federal mandate of $100 million or greater in any year, i.e., it is not a "significant regulatory action" under the Unfunded Mandates Reform Act.

Civil Justice Reform (E.O. 12988)

The Departmental Solicitor's Office has determined that this proposed rule, if finalized, will not unduly burden the judicial system and meets the applicable standards provided in sections 3(a) and 3(b)(2) of E.O. 12988.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This proposed rule includes a new information collection. All information collections require approval by the OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). We may not conduct or sponsor, and you are not required to respond to, a collection of information unless it displays a currently valid OMB control number. The FWS will ask OMB to review and approve the new information collection requirements contained in this rulemaking related to incidental take of marine mammals in proposed 50 CFR subpart I.

As part of our continuing effort to reduce paperwork and respondent burdens, and in accordance with 5 CFR 1320.8(d)(1), we invite the public and other Federal agencies to comment on any aspect of this proposed information collection, including:

(1) Whether or not the collection of information is necessary for the proper performance of the functions of the agency, including whether or not the information will have practical utility;

(2) The accuracy of our estimate of the burden for this collection of information, including the validity of the methodology and assumptions used;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of response.

Comments that you submit in response to this proposed rulemaking are a matter of public record. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

This is a nonform collection. Respondents must comply with the regulations at 50 CFR part 18, which outline the procedures and requirements for submitting a request. Specific regulations governing authorized incidental take of marine mammal activities are contained in proposed 50 CFR part 18, subpart I (nonlethal, incidental, unintentional take by harassment of small numbers of northern sea otters). These proposed regulations provide the applicant with a detailed description of information that we need to evaluate the proposed activity and determine if it is appropriate to issue specific regulations and, subsequently, LOAs. We use the information to verify the findings required to issue incidental take regulations, to decide if we should issue an LOA, (if an LOA is issued) what conditions should be included in the LOA, and to monitor compliance with the regulations and LOA(s).

The proposed new information collection requirements identified below require approval by OMB:

(1) ***Incidental Take of Marine Mammals–Application for Regulations***—Regulations at 50 CFR part 18 require the applicant to provide information on the activity as a whole, which includes, but is not limited to, an assessment of total impacts by all persons conducting the activity. Applicants can find specific requirements in proposed 50 CFR part 18, subpart I. These regulations provide the applicant with a detailed description of information that we need to evaluate the proposed activity and determine whether to issue specific regulations and, subsequently, LOAs. The required information includes:

1. A description of the specific activity or class of activities that can be expected to

result in incidental taking of marine mammals.

2. The dates and duration of such activity and the specific geographical region where it will occur.

3. Based on the best available scientific information, each applicant must also provide:

a. An estimate of the species and numbers of marine mammals likely to be taken by age, sex, and reproductive conditions;

b. The type of taking (e.g., disturbance by sound, injury or death resulting from collision, etc.) and the number of times such taking is likely to occur;

c. A description of the status, distribution, and seasonal distribution (when applicable) of the affected species or stocks likely to be affected by such activities;

d. The anticipated impact of the activity upon the species or stocks; and

e. The anticipated impact of the activity on the availability of the species or stocks for subsistence uses.

4. The anticipated impact of the activity upon the habitat of the marine mammal populations and the likelihood of restoration of the affected habitat.

5. The availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat, and, where relevant, on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance. (The applicant and those conducting the specified activity and the affected subsistence users are encouraged to develop mutually agreeable mitigating measures that will meet the needs of subsistence users.)

6. Suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species through an analysis of the level of taking or impacts and suggested means of minimizing burdens by coordinating such reporting

requirements with other schemes already applicable to persons conducting such activity.

7. Suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking from such specified activities, and evaluating its effects.

8. Applicants must develop and implement a site-specific (or umbrella plan addressing site-specific considerations), FWS-approved marine mammal monitoring and mitigation plan to monitor and evaluate the effectiveness of mitigation measures and the effects of activities on marine mammals and the subsistence use of these species.

9. Applicants must also provide trained, qualified, and FWS-approved onsite observers to carry out monitoring and mitigation activities identified in the marine mammal monitoring and mitigation plan. Resumes for candidate Protected Species Observers (PSOs) will be made available for the FWS to review.

This information is necessary for the FWS to anticipate the impact of the activity on the species or stocks and on the availability of the species or stocks for Alaska Native subsistence uses. Under requirements of the MMPA, we cannot authorize a take unless the total of all takes will have a negligible impact on the species or stocks and, where appropriate, will not have an unmitigable adverse impact on the availability of the species or stocks for subsistence uses. These requirements ensure that applicants are aware of related monitoring and research efforts they can apply to their situation, and that the monitoring and reporting that we impose are the least burdensome to the applicant.

(2) ***Requests for Letters of Authorization (LOA)***—LOAs, which may be issued only to U.S. citizens, are required to conduct activities pursuant to any specific regulations established. Once specific regulations are effective, the FWS will, to the maximum extent possible, process subsequent applications for LOAs within 30 days after receipt of the application by the FWS. All LOAs will specify the period of validity and any additional terms and conditions appropriate for the specific request. Issuance of LOAs will be based on a

determination that the level of taking will be consistent with the findings made for the total taking allowable under the specific regulations.

The request for an LOA must comply with the requirements set forth in proposed § 18.103 and must include the following information:

1. An operational plan that describes in detail the activity (e.g., type of project, methods, and types and numbers of equipment and personnel, etc.), the dates and duration of the activity, and the specific locations affected by the activity;

2. A digital geospatial file of the project footprint;

3. A site-specific marine mammal monitoring and mitigation plan that specifies the procedures to monitor and mitigate the effects of the activities on sea otters; and

4. Plan of Cooperation (POC), if required, to mitigate potential conflicts between the activity and subsistence hunting.

(3) ***Withdrawal of LOA***—Once issued, the LOA may be withdrawn or suspended if the project activity is modified in a way that undermines the results of the evaluation conducted per proposed § 18.104(a), if the conditions of the regulations in the proposed subpart are not being substantially met, or if the taking allowed is or may be having more than a negligible impact on the affected stock of sea otters or an unmitigable adverse impact on the availability of sea otters for subsistence uses.

(4) ***Mitigation–3rd Party Notifications (Community Consultation)***—All applicants for an LOA must contact affected Alaska Native subsistence communities and hunter organizations to discuss potential conflicts caused by the activities and provide the FWS documentation of communications as described in proposed § 18.103.

Documentation must include a summary of any concerns identified by community members and hunter organizations and the applicant's responses to identified concerns. A POC may not be required for an LOA request if no concerns are raised during community consultation regarding impacts to subsistence harvest or Alaska Native communities and subsistence user

organizations.

(5) ***Mitigation–3rd Party Notifications (Vessel Operations)***—Vessel operators must be provided written guidance for avoiding collisions and minimizing disturbances to sea otters. Guidance will include measures identified in proposed § 18.107, Mitigation.

(6) ***Mitigation–Plan of Operations***—When appropriate, a holder of an LOA will be required to develop and implement an FWS-approved POC.

1. The POC must include a description of the procedures by which the holder of the LOA will work and consult with potentially affected subsistence hunters and a description of specific measures that have been or will be taken to avoid or minimize interference with subsistence hunting of marine mammals and to ensure continued availability of the species for subsistence use.

2. The FWS will review the POC to ensure that any potential adverse effects on the availability of the animals are minimized. The FWS will reject POCs if they do not provide adequate safeguards to ensure the least practicable adverse impact on the availability of marine mammals for subsistence use.

(7) ***Mitigation–Designation and Training of Protected Species Observers (PSOs)***—The applicant will designate trained and qualified PSOs to monitor for the presence of sea otters, initiate mitigation measures, and monitor, record, and report the effects of the activities on sea otters. The applicant is responsible for providing training to PSOs to carry out mitigation and monitoring.

(8) ***Mitigation and Monitoring Plan***—Applicants must have an approved mitigation and monitoring plan on file with the FWS's Marine Mammals Management Office (MMM) and onsite that includes the following information:

1. The type of activity and where and when the activity will occur (i.e., a summary of the plan of operation);

2. Personnel training policies, procedures, and materials;

3. Site-specific sea otter interaction risk evaluation and mitigation measures;

4. Sea otter avoidance and encounter procedures; and

5. Sea otter observation and reporting procedures.

(9) ***Onsite Monitoring and Observation Reports***—The proposed regulations also require that each holder of an LOA submit a monitoring report indicating the nature and extent of all takes of marine mammals that occurred incidentally to the specific activity. Since the inception of incidental take authorizations for polar bears (*Ursus maritimus*), Pacific walruses (walruses; *Odobenus rosmarus divergens*), and northern sea otters (otters; *Enhydra lutris kenyoni*), we have required monitoring and reporting during industrial activities. The purpose of monitoring and reporting requirements is to assess the effects of industrial activities on sea otters to ensure that take is minimal to their populations, and to detect any unanticipated effects of take. The monitoring focus has been site-specific, area-specific, or population-specific. Site-specific monitoring measures animal–human encounter rates, outcomes of encounters, and trends of animal activity in the industrial areas, such as sea otter numbers, behavior, and seasonal use. Area-specific monitoring includes analyzing animal spatial and temporal use trends, sex/age composition, and risk assessment to unpredictable events, such as oil spills. Population-specific monitoring includes investigating species life-history parameters, such as population size, recruitment, survival, physical condition, status, and mortality.

(A) ***In-Season Monitoring (Observation Reports)***—Duties of 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. Information in the observation report must include, but is not limited to:

1. PSOs will monitor a pre-clearance zone for 30 minutes prior to the commencement of in-water noise-generating activities and following periods of inactivity of

more than 30 minutes to ensure all sea otters are not within the shutdown zone prior to initiating or resuming in-water noise-generating activities.

2. 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, tidal state, wind force, visibility, and weather condition will be recorded at the beginning and end of a monitoring period, at least every hour in between, at the change of an observer, and upon observation of sea otters.

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

iv. Observation records will also include initial behaviors of the sea otters, descriptions of project activities and in-water noise 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 duration of the encounter, and the distance at last observation in order to monitor cumulative sound exposures.

vi. The PSOs will note any instances of sea otters lingering close to or traveling with vessels for prolonged periods of time.

vii. Monitoring of the shutdown zone must continue for 30 minutes following completion of in-water noise-generating activities.

(B) ***In-Season Monitoring (Activity Progress Reports)***—Holders of an LOA must:

1. Notify the FWS at least 48 hours prior to the commencement of activities.

2. Provide the FWS monthly progress reports for all months during which noise-generating work takes place. The monthly report will contain and summarize the following information:

i. dates, times, weather, and sea conditions (including the Beaufort Scale sea state and wind force conditions) when sea otters were observed;

ii. the number, location, distance from the sound source, and behavior of the sea otters; and

iii. 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.

(10) ***Final Monitoring Report***—A final report will be submitted to the FWS's MMM within 90 days after the expiration of each LOA. The report will include:

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

2. A description of all project activities, any additional work yet to be done, factors influencing visibility and detectability of marine mammals (e.g., sea state, fog, glare, and number of observers), and factors correlated with the presence and distribution of sea otters (e.g., weather, sea state, and project activities).

3. An estimate will be included of the number of sea otters exposed to noise at received levels greater than or equal to Level A harassment and Level B harassment (based on visual observation).

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

5. 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.

6. All reports must be submitted by email to fw7_mmm_reports@fws.gov.

7. 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 (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.

8. Operators must notify the FWS upon project completion or end of the work season.

(11) ***Notification of LOA Incident Report***—

1. Except as otherwise provided in the regulations in the proposed subpart, prohibited taking includes the provisions of § 18.11 as well as: intentional take, lethal incidental take of sea otters, and any take that fails to comply with the regulations in this subpart or with the terms and conditions of an LOA.

2. If specified activities cause unauthorized take, the holder of an LOA must:

i. Cease activities immediately (or reduce activities to the minimum level necessary to maintain safety) and report the details of the incident within 48 hours to the FWS MMM at 1–800–362–5148 (business hours); and

ii. Suspend further activities until the FWS has reviewed the circumstances, determined whether additional mitigation measures are necessary to avoid further unauthorized taking, and notified the LOA holder that project activities may resume.

Title of Collection: Incidental Take of Marine Mammals During Specified Activities, 50 CFR 18.27 and 50 CFR 18, Subpart I.

OMB Control Number: 1018–New.

Form Numbers: None.

Type of Review: New.

Respondents/Affected Public: Federal Government–U.S. Coast Guard.

Total Estimated Number of Annual Respondents: 32.

Total Estimated Number of Annual Responses: 59.

Estimated Completion Time per Response: Completion times vary between 15 minutes and 130 hours, depending on activity.

Total Estimated Number of Annual Burden Hours: 515.

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: On occasion.

Total Estimated Annual Non-hour Burden Cost: None.

Send your written comments and suggestions on this information collection by the date indicated in **DATES** to OMB, with a copy to the FWS Information Collection Clearance Officer, U.S. Fish and Wildlife Service, MS: PRB/PERMA (JAO), 5275 Leesburg Pike, Falls Church, VA 22041–3803 (mail); or by email to *Info_Coll@fws.gov*. Please reference "RIN 1018–BI08" in the subject line of your comments.

Energy Effects

Executive Order 13211 requires agencies to prepare statements of energy effects when undertaking certain actions. This proposed rule provides exceptions from the MMPA's taking prohibitions for entities engaged in specified pile driving and marine construction activities in the specified geographic region**.** By providing certainty regarding compliance with the MMPA, this proposed rule will have a positive effect on the pile driving and marine construction activities. Although the proposed rule requires an applicant to take a number of actions, these

actions have been undertaken by pile driving and marine construction activities for many years as part of similar past regulations. Therefore, this proposed rule is not expected to significantly affect energy supplies, distribution, or use and does not constitute a significant energy action. No statement of energy effects is required.

References

For a list of the references cited in this proposed rule, see Docket No. FWS–R7–ES–2024–0195, available at https://www.regulations.gov.

List of Subjects in 50 CFR Part 18

Administrative practice and procedure, Alaska, Imports, Indians, Marine mammals, Pile driving and marine construction activities, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

For the reasons set forth in the preamble, the FWS proposes to amend part 18, subchapter B of chapter 1, title 50 of the Code of Federal Regulations as set forth below.

PART 18—MARINE MAMMALS

1. The authority citation of 50 CFR part 18 continues to read as follows:

AUTHORITY: 16 U.S.C. 1361 et seq.

2. Amend part 18 by adding subpart I to read as follows:

Subpart I—Nonlethal Taking of Northern Sea Otters Incidental to Pile Driving and Marine Construction in Seward, Sitka, and Kodiak, Alaska

Sec.

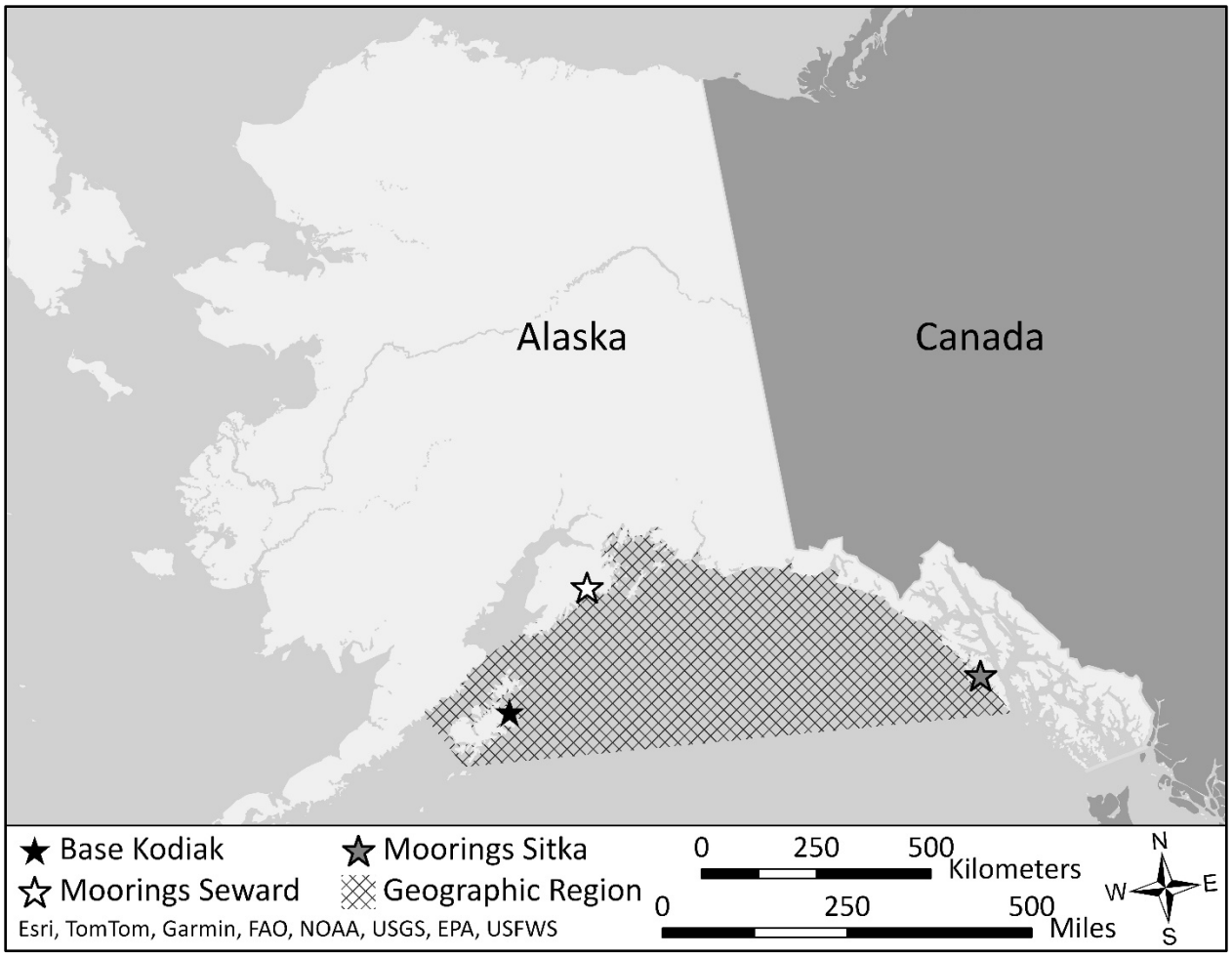
§ 18.100 Specified activities covered by this subpart.

Regulations in this subpart apply to the nonlethal incidental, but not intentional, take, as defined in § 18.3 and under section 3 of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371 *et seq*.), of small numbers of northern sea otters (*Enhydra lutris kenyoni*; hereafter "sea otters") by the U.S. Coast Guard (hereafter "USCG" or "the applicant") while engaged in activities associated with or in support of pile driving and marine construction activities in Seward, Sitka, and Kodiak, Alaska. The applicant is a U.S. citizen as defined in § 18.27(c). A Letter of Authorization (LOA) from the U.S. Fish and Wildlife Service (FWS) is required to authorize incidental take that may occur during the specified activities. The entities described in § 18.103 may request an LOA pursuant to the regulations in this subpart.

§ 18.101 Specified geographic region where this subpart applies.

The specified geographic region for the incidental take regulations (ITR) in this subpart includes Gulf of Alaska coastal waters of three USCG facilities. The specified activities would occur in the waters and intertidal areas of the eastern shore of Resurrection Bay, Alaska, surrounding the new USCG Moorings Seward, the waters and intertidal areas of Sitka Channel, Alaska, surrounding the USCG Moorings Sitka, and the waters and intertidal areas of Womens Bay, Kodiak, Alaska, which surround the USCG Base Kodiak located on the Nyman Peninsula.

Figure 1 to § 18.101—Map of the ITR region including USCG's Moorings Seward, Moorings Sitka, and Base Kodiak in Alaska where the activities covered by this subpart will occur.



§ 18.102 Dates this subpart is in effect.

The regulations in this subpart are effective from [**EFFECTIVE DATE OF FINAL RULE**] through [**DATE 5 YEARS AFTER THE EFFECTIVE DATE OF THE FINAL RULE**].

§ 18.103 Procedure to obtain a Letter of Authorization (LOA).

(a) The applicant must submit the request for an LOA to the FWS Alaska Region, Marine Mammals Management Office (MMM), MS 341, 1011 East Tudor Road, Anchorage, Alaska 99503, at least 30 days prior to the start of the specified activity.

(b) The request for an LOA must comply with the requirements set forth in §§ 18.107 through 18.109 and must include the following information:

(1) An operational plan that describes in detail the activity (e.g., type of project, methods, and types and numbers of equipment and personnel, etc.), the dates and duration of the activity, and the specific locations affected by the activity.

(2) A digital geospatial file of the project footprint.

(3) A site-specific marine mammal monitoring and mitigation plan that specifies the procedures to monitor and mitigate the effects of the activities on sea otters.

(4) Documentation of the applicant's communication with potentially affected subsistence communities surrounding Seward, Sitka, and Kodiak and appropriate subsistence user organizations to discuss the location, timing, and methods of activities and identify and mitigate any potential conflicts with subsistence sea otter hunting activities.

(i) The applicant must specifically inquire of relevant communities and organizations if the activity will interfere with the availability of sea otters for the subsistence use of those groups.

(ii) Documentation must include a summary of any concerns identified by community members and hunter organizations and the applicant's responses to identified concerns.

(iii) A plan of cooperation (POC) may not be required for an LOA request if no concerns are raised during community consultation regarding impacts to subsistence harvest or Alaska Native communities and subsistence user organizations.

(5) A POC, if required, to mitigate potential conflicts between the activity and subsistence hunting.

§ 18.104 How the FWS will evaluate a request for an LOA.

(a) The FWS will evaluate each request for an LOA to determine if the specified activity is consistent with the analysis and findings we made during the rulemaking process for this subpart.

(1) We will determine whether the level of activity identified in the request exceeds the level that we analyzed in estimating the number of animals to be taken and evaluating whether

there will be a negligible impact on the species or stock and an unmitigable adverse impact on the availability of the species or stock for subsistence uses.

(2) If the level of activity is greater, we will evaluate the potential impact of this greater level of activity to determine if the potential impact is consistent with our findings. Depending on the results of the evaluation, we may grant the requested authorization, add further conditions, or deny the request for an LOA. An LOA will be limited to a 1-year period or less within the period set forth in § 18.102.

(b) The FWS will make decisions concerning withdrawal or suspension of an LOA (see § 18.27(f)(5) and (6)).

§ 18.105 Authorized take allowed under an LOA.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the applicant must apply for and obtain an LOA in accordance with §§ 18.27(f), 18.103, and 18.104.

(b) An LOA issued under this subpart allows for the nonlethal, incidental, but not intentional take by harassment, as defined under section 3 of the MMPA (16 U.S.C. 1362), of sea otters during activities specified in § 18.100 within the Seward, Sitka, and Kodiak ITR region of Alaska described in § 18.101.

(c) Each LOA will set forth:

(1) Permissible methods of incidental take;

(2) Means of effecting the least practicable adverse impact on the species, its habitat, and the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(d) Allowable take under these regulations is limited to take by Level B harassment and Level A harassment (as those terms are defined at 16 U.S.C. 1362).

(e) Each LOA will identify terms and conditions for each activity and location.

§ 18.106 Prohibited take under an LOA.

(a) Except as otherwise provided in this subpart, prohibited taking includes the provisions of § 18.11 as well as: intentional take, lethal incidental take of sea otters, and any take that fails to comply with the regulations in this subpart or with the terms and conditions of an LOA.

(b) If specified activities cause unauthorized take, the holder of an LOA must:

(1) Cease activities immediately (or reduce activities to the minimum level necessary to maintain safety) and report the details of the incident within 48 hours to the FWS MMM at 1–800–362–5148 (business hours); and

(2) Suspend further activities until the FWS has reviewed the circumstances, determined whether additional mitigation measures are necessary to avoid further unauthorized taking, and notified the LOA holder that project activities may resume.

§ 18.107 Mitigation.

(a) *Mitigation measures for all LOAs*. The applicant, including all personnel operating under the applicant's authority (or "operators," including contractors, subcontractors, and representatives) must undertake the following activities to avoid and minimize take of sea otters by harassment.

(1) Implement policies and procedures to avoid interactions with and minimize to the greatest extent practicable adverse impacts on sea otters, their habitat, and the availability of these marine mammals for subsistence uses.

(2) Develop avoidance and minimization policies and procedures, in cooperation with the FWS, that include temporal or spatial activity restrictions to be used in response to the presence of sea otters engaged in a biologically significant activity (e.g., resting, feeding, hauling out, mating, or nursing).

(3) Cooperate with the FWS's MMM Office and other designated Federal, State, and local agencies to monitor and mitigate the impacts of pile driving and marine construction activities on sea otters.

(4) Allow FWS personnel or the FWS's designated representative to board project vessels or visit project worksites for the purpose of monitoring impacts to sea otters and to subsistence uses of sea otters at any time throughout project activities so long as it is safe to do so.

(5) Designate trained and qualified protected species observers (PSOs) to monitor for the presence of sea otters, initiate mitigation measures, and monitor, record, and report the effects of the activities on sea otters. The applicant is responsible for providing training to PSOs to carry out mitigation and monitoring.

(6) Have an approved mitigation and monitoring plan on file with the FWS MMM and onsite that includes the following information:

(i) The type of activity and where and when the activity will occur (i.e., a summary of the plan of operation);

(ii) Personnel training policies, procedures, and materials;

(iii) Site-specific sea otter interaction risk evaluation and mitigation measures;

(iv) Sea otter avoidance and encounter procedures; and

(v) Sea otter observation and reporting procedures.

(b) *Mitigation measures for in-water noise-generating work*. The applicant must carry out the following measures:

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

(2) If a sea otter enters or appears likely to enter the shutdown zone, in-water activities must be shut down until either the sea otter has been visually observed outside the shutdown zone or at least 15 minutes have elapsed since the last observation time without redetection of the sea otter.

(i) During in-water activities at Sitka and Seward, an acoustic shutdown zone of 85 m (280 ft) must be enforced during down-the-hole (DTH) drilling of concrete piles, and a shutdown zone of 30 m (99 ft) must be enforced during all other in-water activities.

(ii) During in-water activities at Kodiak, regardless of predicted sound levels, a physical interaction shutdown zone of at least 20 m (66 ft) must be enforced.

(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 if possible), followed by a 1-minute waiting period. This procedure will be conducted a total of three times before full-powered strikes if practicable. If unsafe working conditions during soft-starts occur (e.g., equipment failure), then the applicant may elect to discontinue soft-starts, and the applicant must notify the FWS if the soft-start procedure is discontinued.

(4) If practicable, a soft-start procedure for vibratory pile-driving activities may be implemented if the vibratory hammer has been idled for more than 30 minutes. During the soft-start procedure, initial noise generation must be limited to 15 seconds (at reduced energy if possible), followed by a 1-minute waiting period. This procedure will be conducted a total of three times before full-powered vibratory pile driving commences. If unsafe working conditions during soft-starts occur (e.g., equipment failure), then the applicant may elect to discontinue soft-starts and the applicant must notify the FWS if the soft-start procedure is discontinued.

(5) 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.

(6) All in-water work along the shoreline must be conducted during lower tidal conditions when the site is dewatered to the maximum extent practicable.

(7) When practicable, or when required by applicable local, State, or Federal regulations, the applicant must use containment methods (e.g., silt curtains) to isolate areas with high levels of turbidity during DTH drilling and vibroflot column installation.

(c) *Mitigation measures for vessel operations*. Vessel operators must take every precaution to avoid harassment of sea otters during vessel operations. The applicant must carry out the following measures:

(1) Vessels must maintain a minimum distance of 500 m (0.3 mi) from rafts of 10 or more sea otters unless otherwise needed for safety. If a vessel must transit within 500 m (0.3 mi) from rafts of sea otters, the vessel must travel at a reduced speed and maintain the maximum distance practicable between the vessel and raft of sea otters. Vessels must reduce speed and maintain a minimum distance of 100 m (328 ft) from all sea otters unless otherwise needed for safety.

(2) Vessels must not be operated in such a way as to separate members of a group of sea otters (two or more sea otters) from other members of the group, encircle sea otters, or impede movement of sea otters. Vessels must use established navigation channels or commonly recognized vessel traffic corridors and avoid approaching sea otters or impeding sea otter movements when traveling near the shoreline in shallow water (<20 m [<66 ft]) whenever practicable.

(3) When weather conditions require, such as when visibility drops, vessels must adjust speed accordingly to reduce 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 measures identified in paragraphs (c)(1) through (4) of this section.

(d) *Mitigation measures for the subsistence use of sea otters.* Holders of an LOA must conduct their activities in a manner that, to the greatest extent practicable, minimizes adverse impacts on the availability of sea otters for subsistence uses.

(1) *Community consultation.* Prior to receipt of an LOA, applicants must consult with potentially affected communities and appropriate subsistence user organizations to discuss potential conflicts with subsistence sea otter hunting caused by the location, timing, and methods of operations and support activities (see § 18.103 for details). If community concerns suggest that the activities may have an adverse impact on the subsistence uses of this species, the

applicant must address conflict avoidance issues through a POC as described in paragraph (d)(2) of this section.

(2) *Plan of cooperation.* Based on community consultations, the holder of an LOA will be required to modify their POC if directed by the FWS.

(i) The POC must include a description of the procedures by which the holder of the LOA will work and consult with potentially affected subsistence hunters and a description of specific measures that have been or will be taken to avoid or minimize interference with subsistence hunting of sea otters and to ensure continued availability of the species for subsistence use.

(ii) The FWS will review the POC to ensure that any potential adverse effects on the availability of sea otters are minimized. The FWS will reject POCs if they do not provide adequate safeguards to ensure the least practicable adverse impact on the availability of sea otters for subsistence use.

§ 18.108 Monitoring.

(a) Operators shall work with 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.

(b) Duties of 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.

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

(d) All PSOs will complete a training course designed to familiarize individuals with monitoring and data collection procedures. This training will be completed prior to starting work.

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.

(e) The PSOs 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.

(f) The PSOs will monitor a pre-clearance zone for 30 minutes prior to the commencement of in-water noise-generating activities and following periods of inactivity of more than 30 minutes to ensure all sea otters are not within the shutdown zone prior to initiating or resuming in-water noise-generating activities.

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

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

(2) Global positioning system data, sea state, tidal state, wind force, visibility, and weather condition will be recorded at the beginning and end of a monitoring period, at least every hour in between, at the change of an observer, and upon observation of sea otters.

(3) Observation records of sea otters will include date; time; the observers' locations; sea otter's heading (if moving); weather condition; visibility; number of sea otters; group composition (adults/juveniles); and the location of the sea otters (or distance and direction from the observer).

(4) Observation records will also include initial behaviors of the sea otters, descriptions of project activities and in-water noise 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.

(5) 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 duration of the encounter, and the distance at last observation in order to monitor cumulative sound exposures.

(6) The PSOs will note any instances of sea otters 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 in-water noise-generating activities.

§ 18.109 Reporting requirements.

(a) Operators must notify the FWS at least 48 hours prior to commencement of activities.

(b) Monthly reports will be submitted to the FWS's 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 observed; 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.

(c) A final report will be submitted to the FWS's MMM within 90 days after the expiration of each LOA. The report will include:

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

(2) A description of all project activities, any additional work yet to be done, factors influencing visibility and detectability of marine mammals (e.g., sea state, fog, glare, and number of observers), and factors correlated with the presence and distribution of sea otters (e.g., weather, sea state, and project activities).

(3) An estimate will be included of the number of sea otters exposed to noise at received levels greater than or equal to Level A harassment and Level B harassment (based on visual observation).

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

(5) 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.

(d) All reports must be submitted by email to *fw7_mmm_reports@fws.gov*.

(e) 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 (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.

(f) Operators must notify the FWS upon project completion or end of the work season.

§ 18.110 Information collection requirements.

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this part and assigned OMB Control Number 1018–New. Federal agencies 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. Direct comments regarding the burden estimate or any other aspect of the information collection to the FWS Information Collection Clearance Officer at the address provided at 50 CFR 2.1(b).

Maureen Foster,
Chief of Staff,
Exercising the Delegated Authority of the Assistant Secretary for Fish and Wildlife and Parks,
Department of the Interior

[FR Doc. 2025-11499 Filed: 6/20/2025 8:45 am; Publication Date: 6/23/2025]