



U.S. Fish and Wildlife Service

Marine Mammals Management Office Anchorage, Alaska

Final Environmental Assessment

For an

Incidental Harassment Authorization for Small Numbers of Southwest Alaska Stock of Northern Sea Otters (*Enhydra lutris kenyoni*) During Pile Driving and Marine Construction Activities in Kodiak, Alaska

March 1, 2024

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Proposed Action:

Issuance of an Incidental Harassment Authorization for take by harassment of small numbers of northern sea otters (*Enhydra lutris kenyoni*) incidental to pile driving and marine construction activities in Kodiak, Alaska.

Geographic Location:

Near Channel in Kodiak, Alaska

Type of Statement: Environmental Assessment

Date: 2024

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Abstract:

This Environmental Assessment analyzes the environmental impacts of issuance by the U.S. Fish and Wildlife Service, of an Incidental Harassment Authorization, pursuant to section 10l(a)(5)(D) of the Marine Mammal Protection Act, for the incidental take by harassment of small numbers of northern sea otters. Take may result from pile driving and marine construction activities in Kodiak, Alaska.

Citation:

The U.S. Fish and Wildlife Service, Marine Mammals Management, 2024 Final Environmental Assessment for an Incidental Harassment Authorization to Authorize the Incidental Harassment of Small Numbers of Southwest Alaska Stock of Northern Sea Otters (*Enhydra lutris kenyoni*) During Pile Driving and Marine Construction Activities in Kodiak, Alaska. Department of the Interior. Anchorage, Alaska.

Executive Summary

The U.S. Fish and Wildlife Service (Service) prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) to determine whether impacts of issuance of an Incidental Harassment Authorization (IHA) under the Marine Mammal Protection Act (MMPA) for take by harassment of a small number of northern sea otters (*Enhydra lutris kenyoni*, hereafter "sea otters") from the Southwest Alaska stock would constitute a major Federal action significantly affecting the quality of the human environment, such that preparation of an Environmental Impact Statement (EIS) is required. This Final EA analyzes the potential impacts of issuing the IHA and may support a Finding of No Significant Impact that fulfills the Service's requirements under NEPA with respect to this proposed action.

The Service received a request from Trident Seafoods Corporation for an IHA for the incidental take by harassment of sea otters resulting from pile driving and marine construction activities for a 1-year period from the date of issuance. The requested IHA would apply to activities in Near Island Channel at Kodiak, Alaska. While harassment and other forms of take are generally prohibited under the MMPA, the law also provides certain specific exceptions to otherwise prohibited take. Specifically, for this EA, section 101(a)(5)(D)(i) of the MMPA directs the Service, upon request, to authorize, for up to one year, the incidental taking by harassment of small numbers of marine mammals if the Agency finds that such take would have a negligible impact on the species or stock, and would not have an unmitigable impact on the availability of the species for Alaska Native subsistence uses. If issued, the IHA would not authorize the activities described in Trident Seafoods Corporation's request, only the incidental harassment of sea otters anticipated to result from those activities.

Two alternatives were analyzed: a Proposed Action and a No Action alternative. The proposed action is issuance of an IHA for incidental take of sea otters by harassment during the applicant's specified activities. The IHA would: (i) establish permissible methods of take and associated requirements for monitoring and reporting; and (ii) authorize the nonlethal incidental unintentional take of small numbers of sea otters within the specified area by harassment resulting from the planned pile driving and marine construction activities. Under the No Action alternative, the Service would not issue an IHA or otherwise authorize harassment of sea otters by Trident Seafoods Corporation's specified activities. Selection of the No Action alternative would not prohibit the applicant from conducting the planned activities; however, the applicant would be responsible for preventing prohibited take.

This EA indicates that the issuance of the IHA is not a major Federal action that would significantly affect the quality of the human environment, and that preparation of an EIS for the issuance of the IHA is not required by 102(2) of the NEPA or its implementing regulations. Based on this analysis, the Service proposes a finding that issuance of the IHA will not significantly affect the quality of the natural or human environment.

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PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

The U.S. Fish and Wildlife Service (Service) prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA), as amended, of 1969 (42 U.S.C. 4321, et seq.), and the Council on Environmental Quality (CEQ) regulations codified in the Code of Federal Regulations (CFR) at 40 CFR 1500–1508, as amended, to determine whether impacts from issuance of an Incidental Harassment Authorization (IHA) under the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361, et seq.) for take by harassment of a small number of northern sea otters (Enhydra lutris kenyoni, hereafter "sea otters") from the Southwest Alaska stock in Near Island Channel at Kodiak, Alaska, would significantly affect the quality of the human environment. We have determined the potential impacts are not significant, and this analysis, with supporting analyses incorporated by reference, supports a Finding of No Significant Impact (FONSI).

All species of marine mammals are protected under the MMPA. The MMPA prohibits the taking of marine mammals, except as explicitly exempted or authorized. Under the MMPA "take" means to harass, hunt, capture, or kill, or to attempt to harass, hunt, capture, or kill any marine mammal (16 U.S.C. 1362(13)). The MMPA defines "harassment," for non-military readiness activities, as any act of pursuit, torment, or annoyance which: (1) has the potential to injure a marine mammal or marine mammal stock (the MMPA calls this "Level A harassment"); or (2) 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 calls this "Level B harassment")¹. Though the MMPA establishes a moratorium on the taking of all marine mammals in U.S. waters and the High Seas, it also makes certain exceptions. The exception relevant here (Section 101(a)(5)(D) of the MMPA) directs the Service to authorize, upon request, the incidental harassment of small numbers of animals if it finds that such take would have a negligible impact on the species or stock and would not have an unmitigable impact on the availability of the species for subsistence use. Section 101(a)(5)(D)(ii) of the MMPA further directs the Service to prescribe in such authorizations, where applicable:

- Permissible methods of taking by harassment pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for subsistence uses;
- The measures that the Service determines are necessary to ensure no unmitigable adverse impact on the availability of the species or stock for taking for subsistence uses; and
- Requirements for monitoring and reporting of such taking.

¹ The MMPA also defines separately harassment in the case of a military readiness activity; however, because the activities at issue here do not pertain to military readiness, MMPA definitions pertaining to military readiness activities are not further discussed in this EA.

Trident Seafoods Corporation (hereinafter also referred to as the "applicant") submitted a request to the Service for an IHA for the incidental take by harassment of sea otters that could result from work related to pile driving and marine construction activities for the period of 1 year from the date of issuance. The applicant's specified activities could result in the non-lethal incidental harassment of sea otters, and Trident Seafoods Corporation has requested an IHA from the Service. The proposed IHA will authorize take by Level A and Level B harassment; no lethal take is anticipated, nor was authorization for such take requested.

On January 25, 2024, the Service published a *Federal Register* notice requesting public comment on its Proposed IHA at the same time it released a Draft EA likewise for public review and comment (89 FR 4970). The Service received four (4) comments on the Proposed IHA and no comments on the draft EA; all four comments expressed general opposition to project and/or the issuance of the IHA based on the individual's personal beliefs and one of the four comments also generally requested the Service protect northern sea otters. The final IHA does not authorize the applicant's specified activities. Rather, it prescribes permissible methods of taking by harassment pursuant to such activities, other means of effecting the least practicable adverse impact on such species or stock and its habitat, and requirements pertaining to the monitoring and reporting of such taking.

1.2 Purpose and Need

The purpose of the proposed action is to respond to Trident Seafoods Corporation's request for an IHA that authorizes the incidental harassment of northern sea otters resulting from work related to pile driving and marine construction activities. The need for the proposed action is established by Trident Seafoods Corporation's request for an IHA pursuant to Section 101(a)(5)(D) of the MMPA.

1.3 Scope of Analysis

In accordance with the NEPA and CEQ implementing regulations, this document analyzes whether the Proposed Action (*i.e.*, issuance of an IHA for the activities specified in the applicant's request) would result in impacts that significantly affect the quality of the human environment. As stated previously, issuance of the IHA in accordance with the MMPA would not authorize the pile driving and marine construction activities specified in the applicant's request. Rather, issuance of the IHA would only authorize the incidental take (*i.e.*, Level A and Level B harassment of sea otters) that may occur associated with the applicant's specified activities. The scope of analysis for this EA therefore includes the effects of issuing the requested IHA on elements of the human environment. We analyze alternatives, including a no action alternative as well as means of satisfying the Service's responsibilities under Section 101(a)(5)(D)(ii) of the MMPA. This EA does not further evaluate effects on the elements listed in Table 1 because authorizing the incidental take of a small number of sea otters would not appreciably affect those elements.

Table 1. Components of the human environment not affected by issuance of this IHA.

Biological	Dhygiaal	Socioeconomic / Cultural
Biological	Physical	Socioeconomic / Chiffiral

Amphibians	Air Quality	Military Activities
Marine Mammals	Geography	National Historic Preservation
(except Southwest	Geography	Sites
Alaska northern sea	Land Use	National Trails
otters)	Oceanography	Low Income Populations
Invasive Species	State Marine Protected Areas	Minority Populations
Seabirds	Federal Marine Protected Areas	Nationwide Inventory of Rivers
Plants	National Estuarine Research	Public Health and Safety
	Reserves	
Fish	National Marine Sanctuaries	Historic and Cultural Resources
Aquatic Organisms	Park Land	
Ecologically Critical	Prime Farmlands	
Areas	rime raimands	
Essential Fish Habitat	Wetlands	
	Wild and Scenic Rivers	

PROPOSED ACTION AND ALTERNATIVES

2.1 Alternative 1: Proposed Action – Issuance of the Incidental Harassment Authorization

The Proposed Action is to issue the IHA for the nonlethal, incidental take by Level A and Level B harassment of a small number of sea otters resulting from pile driving and marine construction activities in Near Island Channel at Kodiak Alaska. The Final IHA will be effective for a period of up to 1 year. The IHA provides an overall set of requirements for implementing Trident Seafoods Corporation's planned mitigation measures, as well as monitoring and reporting protocols. Take that exceeds the amount described in the IHA or occurs as a result of specified activity implementation inconsistent with that described in the IHA or without full implementation of the requirements of the IHA remains prohibited.

In light of the statutory directive to issue an IHA upon request when the Service makes certain findings, and the proposed findings contained within the prepared IHA and this EA, the Service has identified the Proposed Action, issuance of the IHA, as its preferred alternative. The Service has also considered the No Action Alternative, not issuing the IHA, which is described in detail further below in this section.

2.1.1 Covered Parties

Trident Seafoods Corporation is the applicant; however, there may be contracted entities on the project. Pile driving and marine construction activities may be completed by an entity contracted by Trident Seafoods Corporation.

2.1.2 Geographic Location

For a detailed description of the activities specified in Trident's request, refer to the Request for an Incidental Harassment Authorization (SolsticeAK 2023; received October 9, 2023).

The specified geographic region covered by the requested IHA encompasses the waters of Near Island Channel in Kodiak, Alaska. Kodiak is located along the northeastern side of Kodiak Island. The bunkhouse dock is located on the northern shore of Near Island Channel, along the

southwestern edge of downtown Kodiak, Alaska (Figure 1).

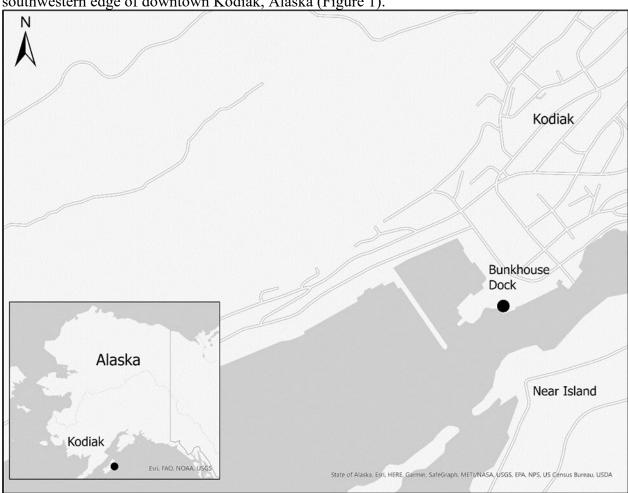


Figure 1. Specified geographic region and project location.

2.1.3 Description of Planned Activities

The bunkhouse dock project involves replacement of a dock at the crew bunkhouse and associated facilities on the northern shore of Near Island Channel in Kodiak, Alaska. The project will include the removal of 60 41-centimeter (cm) (16-inch (in)) diameter steel piles, 75 36-cm (14-in) steel piles, and 100 36-cm (14-in) timber piles; installation of 26 41-cm (16-in) and 52 61-cm (24-in) diameter steel piles; the installation and removal of 20 61-cm (24-in) temporary steel piles to guide the permanent piles into place; and the out of water installation of dock

components such as bull rail, fenders, mooring cleat, pre-cast concrete dock surface, and mast lights. Pile installation and removal activities are expected to take place over 55 non-consecutive days for approximately 94 hours. Pile installation will be done with a combination vibratory and down-the-hole (DTH) drilling. Temporary and existing piles will be removed with the vibratory hammer. Materials and equipment will be transported via barges and workers will be transported to and from the barge work platform via skiff.

2.1.4 The Nature and Level of Take

The northern sea otter is the only marine mammal under the Service's jurisdiction that normally occupies waters surrounding Kodiak Island. Sea otters in Alaska are represented by three stocks. Those at Kodiak Island belong to the Southwest Alaska stock. Two other stocks occur in Southeast and Southcentral Alaska. A detailed description of the Southwest Alaska Stock of northern sea otters can be found in the "Northern Sea Otter (Southwest Alaska) Stock Assessment Report" (announced at 88 FR 53510, August 8, 2023, USFWS 2023), and available at https://www.fws.gov/media/northern-sea-otter-southwest-alaska-stock-assessment-report-0

Sea otters are likely to be harassed by in-water noise associated with pile-driving activities and the presence and operation of vessels. Sea otters of the Southwest Alaska stock may occur anywhere within the specified project area. We determined the number of otters expected to be present in Near Island Channel using sightings data collected during work conducted at the Kodiak Ferry terminal between November 2015 and June 2016 (ABR, 2016). Sea otters were generally observed in singles or small groups with total daily counts of fewer than ~40 animals. However, there were several days on which rafts of 50 to 200 sea otters were observed with total daily counts of up to 459 animals. Sightings of large rafts and high daily totals coincided with days on which the observers noted higher sea states and it is likely that sea otters came from nearby exposed coastline to seek shelter Near Island Channel during storm events. The Service estimated the anticipated number of sea otters (460) that would be subjected to take via the specified activities. Since these sea otters could subjected to multiple instances of take, the Service also estimated the total number of takes anticipated to occur (3,160). To estimate the number of sea otters anticipated in the waters surrounding Near Island Channel during the project, we applied the distribution of daily sea otter counts observed during the Kodiak Ferry work (ABR 2016) to the length of Trident's work period (55 days). We used the result to estimate the daily sea otter counts anticipated during Trident's work period (Table 2). For a detailed description of the evaluation of takes during the specified activities, see the Estimated Take section in the Proposed IHA (89 FR 4970).

Table 2. Distribution of days anticipated within Trident's 55-day work period for each category of daily sea otter counts and anticipated total number of exposures of sea otters in Near Island Channel over the duration of the project. Based on sightings data from observations conducted at Kodiak Ferry terminal (ABR 2016).

Range of daily		Exposures of sea
sea otter	days in 55-day	otters throughout
count	period	project
1 to 10	19	190
11 to 20	9	180

21 to 30	4	120
31 to 40	5	200
41 to 50	3	150
51 to 60	1	60
61 to 75	2	150
76 to 85	4	340
85 to 100	2	200
101 to 135	2	270
136 to 155	1	155
156 to 225	1	225
226 to 460	2	920
Totals	55	3,160

2.1.5 Mitigation and Monitoring

The IHA specifies means for effecting the least practicable adverse impact on sea otters and their habitat, paying particular attention to habitat areas of significance. The applicant will be required to implement the specified activities as described in its application. The applicant's minimization measures for all activities include, but are not limited to:

- Conducting activities in such a way as to minimize adverse impacts to sea otters, their habitat, and their availability for subsistence uses.
- Consulting with affected subsistence communities and marine mammal management groups to discuss potential conflicts with subsistence hunting.
- If necessary, developing a Plan of Cooperation (POC) to ensure activities will not interfere with subsistence hunting, and adverse effects on availability of sea otters will be minimized.
- Monitoring and reporting.

The applicant will also implement additional minimization measures when conducting certain activities. These measures include but are not limited to:

- Establishment of shutdown and monitoring zones;
- Visual mitigation monitoring by designated Protected Species Observers (PSO);
- Site clearance before startup;
- Soft-start procedures; and
- Shutdown procedures.

Additional mitigation measures can be read in the Proposed IHA (89 FR 4970). The Service has not identified any additional (i.e., not already incorporated into the applicant's request) mitigation or monitoring measures that are practicable and would further reduce potential impacts to sea otters and their habitat.

Holders of an IHA must comply with any stipulated conditions and cooperate with the Service and other designated Federal, State, and local agencies to monitor the impacts of the specified activities on marine mammals and subsistence users. As the project area is within the city limits of Kodiak, the specified activities do not overlap with current subsistence harvest areas. Despite no conflict with subsistence use being anticipated, the Service 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 applicant will develop a POC specifying the particular steps necessary to minimize any effects the project may have on subsistence harvest.

The applicant will keep the Service informed of the impacts of specified activities on marine mammals by reporting sea otter sightings and submitting progress reports. The applicant will report all observations of sea otters within 48 hours. The applicant will report all incidents in which unauthorized take may have occurred immediately, and no later than 48 hours after the incident; and will suspend further activities until the Service has reviewed the circumstances and determined whether additional mitigation measures are necessary to avoid further unauthorized taking. Injured, dead, or distressed sea otters that are clearly not associated with specified activities from the project (*e.g.*, animals found outside the project area, previously wounded animals, or carcasses with moderate to advanced decomposition or scavenger damage) must also be reported to the Service as soon as is practicable and no more than 48 hours, after discovery.

2.2 Alternative 2: No Action Alternative

Under this alternative, the Service would not issue a Final IHA. The activities described above may proceed, but Trident Seafoods Corporation would remain liable for any take of sea otters that result from those activities. The applicant would not be obligated to comply with the mitigation, monitoring, and reporting requirements identified in the IHA, but may elect to do so in order to minimize their liability under the MMPA or for other reasons.

2.3 Alternatives Considered but Not Carried Forward for Analysis

The Service did not identify any other reasonable alternatives to analyze in this EA.

AFFECTED ENVIRONMENT

3.1 Biological Environment

Sea otters may be distributed anywhere within the specified project area other than upland areas; however, they generally occur in shallow water near the shoreline. They are most commonly observed within the 40-m (131-ft) depth contour (USFWS 2023), although they can be found in areas with deeper water. Ocean depth is generally correlated with distance to shore, and sea otters typically remain within 1 to 2 kilometers (km) (0.62 to 1.24 miles (mi)) of shore (Riedman

and Estes 1990). They tend to be found closer to shore during storms, but they venture farther out during good weather and calm seas (Lensink 1962, Kenyon 1969). In the 14 aerial surveys conducted from 1995 to 2012 in Southeast Alaska, 95 percent of sea otters were found in areas shallower than 40 m (131 ft) (Tinker *et al.* 2019). Areas important to mating for sea otters include marine coastal regions containing adequate food resources within the 40-m (131-ft) depth contour.

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). Breeding males stay for all or part of the year in a breeding territory covering up to 1 km (0.62 mi) of coastline, while adult females maintain home ranges of approximately 8 to 16 km (5 to 10 mi), which may include one or more male territories. Juveniles move greater distances between resting and foraging areas (Lensink 1962, Kenyon 1969, Riedman and Estes 1990, Tinker and Estes 1996). 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 (hr) (km/hr; 3.4 mi/hr) (Garshelis and Garshelis 1984).

The Southwest Alaska sea otter stock occurs from western Cook Inlet to Attu Island in the Aleutian chain (USFWS 2023). The Southwest Alaska sea otter stock was listed as threatened under the Endangered Species Act (ESA) in 2005 as a distinct population segment (DPS) (70 FR 46366, August 9, 2005). This stock is divided into five management units (MUs): Western Aleutians; Eastern Aleutians; South Alaska Peninsula; Bristol Bay; and Kodiak, Kamishak, and Alaska Peninsula (USFWS 2013, 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 MUs extends from Castle Cape to Western Cook Inlet on the southern side of the Alaska Peninsula and also encompasses Kodiak Island (USFWS 2023).

The Service assessed whether the proposed action would affect components of the biological environment other than sea otters. The provisions of the IHA measures are specific to sea otters, and we identified no mechanisms through which implementing the mitigation measures or monitoring and reporting requirements in the IHA would adversely affect any other components of the biological environment.

3.2 Physical Environment

The physical environment where the geographic area of the IHA would be effective is along the northern shore of Near Island Channel at Kodiak, Alaska.

Finalizing the Proposed IHA and authorizing the nonlethal incidental take by harassment of sea otters would not have any effects on the physical environment. Therefore, no further discussion of the physical environment is provided.

For more information regarding the physical environment of Southwest Alaska sea otters, refer to the following: https://www.regulations.gov/document/FWS-R7-ES-2022-0155-0013.

3.3 Socio-Economic Environment

The economies of the communities of the Southwest Alaska region are tied closely with the seafood industry (both commercial fishing and fish processing) and the tourism industry. Other major employers in the area include municipal, state, and federal governments, and Alaska Native Corporations. In Kodiak specifically, much of the economy relies on fishing and port-related work in addition to military operations and tourism.

3.3.1 Subsistence Harvest Levels and Trends

Subsistence harvest of marine mammals by Alaska Native Peoples plays an important role in the culture and economy of villages throughout coastal Alaska. Sea otters are commonly hunted for their pelts, which are made into clothing and handicrafts. The sale of handicrafts provides supplemental income and helps to sustain subsistence ways of life (Pungowiyi 2000). Although sea otter harvests are part of the subsistence traditions of many communities along the coast of Southwest Alaska, they are not considered an important subsistence food source.

Information on subsistence harvests of sea otters in Kodiak was obtained through the Service's Marking, Tagging, and Reporting Program. Very little subsistence harvest of sea otters occurs within 3.2 km (2 mi) of Kodiak, and it is illegal to fire a weapon in or near the harbor. Subsistence harvest of sea otters around Kodiak Island takes place primarily near Ouzinkie, Kodiak, and Port Lions with totals of 422, 192, and 130 sea otters taken, respectively, from 2017 through 2021.

ENVIRONMENTAL CONSEQUENCES

4.1 Alternative 1: Proposed Action – Issuance of the Incidental Harassment Authorization

Under this alternative, the Service would issue an IHA effective for 1 year. The IHA would include an overall set of requirements under which take would be authorized. Trident Seafoods Corporation, and their contractors, conducting activities pursuant to the IHA would be required to implement all mitigation, monitoring, and reporting requirements described in the request or otherwise prescribed in the IHA. If the IHA were not issued, the applicant could conduct the project without implementing the mitigation and monitoring measures prescribed in the IHA.

4.1.1 Potential Impacts on the Biological Environment

The primary components of the biological environment that may be affected by the proposed action are the Southwest Alaska stock of sea otters. We expect issuance of the IHA to have no significant impacts on the Southwest Alaska stock for the following reasons: (1) the take of only

a small number of sea otters would be authorized, and all authorized takes would be via Level B harassment; (2) the total amount and level of authorized takes would have a negligible impact (as that term is used in the MMPA process) on the Southwest Alaska stock of sea otters; and (3) none of the reasonably foreseeable impacts associated with issuing the IHA would cause any population-level effects to the affected stocks of sea otters.

The expected Level B harassment is of no more than 3,160 takes of 460 sea otters over the 1-year IHA period. Take of no more than 460 animals is 0.9 percent of the best available estimate of the current population size of 51,935 animals in the Southwest Alaska stock (USFWS 2023) ([$460 \div 51,935$] x $100 \approx 0.9$).

The incidental Level B harassment of no more than 460 sea otters is unlikely to lead to significant consequences for the health, reproduction, or survival of affected animals. Disturbances to sea otters are expected to have no more than short-term, temporary, and minor impacts on individuals and their behavior. These short-term, temporary impacts would likely be characterized by a bout of increased energy expenditure, or a temporary threshold shift in hearing. Neither a bout of increased energy expenditure nor a temporary threshold shift in hearing would have lasting impacts that could significantly affect an individual's health, reproduction, or survival or otherwise cause any population-level effects, which is our standard for evaluating whether impacts are "significant" for the purposes of this EA.

The mitigation measures proposed in the IHA would cause no additional impacts to sea otters. All observations will be conducted either from shore or from a work barge, no monitoring skiff will be used.

4.1.2 Potential Impacts on the Physical Environment

Issuing the IHA and authorizing the incidental harassment of sea otters would have no effect on the physical environment.

4.1.3 Potential Impacts on the Socio-Economic Environment

The IHA project area is within the City of Kodiak. While subsistence harvesting may occur near the project area, it is unlikely to occur in the impact area due to the proximity of the community.

4.1.3.1 Effects of Proposed Action on Subsistence Harvest

Construction activities such as noise, accidental spills, and presence of workers may hinder subsistence harvest if activities displace animals beyond the hunting range of subsistence communities, cause a change in an animal's normal behavior, or displace hunters away from productive areas. Disturbances associated with construction activities could also heighten the sensitivity of animals to humans, with potential impacts to hunting success. However, the area surrounding the project location is within the city limits of Kodiak, and human presence is common. Most subsistence harvest of sea otters occurs more than 3.2 km (2 mi) outside of Kodiak, so the incidental harassment of sea otters within the project area is unlikely to disturb or

displace the sea otters that are available for harvest. The planned construction activities do not occur in subsistence harvest areas, nor do they preclude access to hunting areas.

4.1.3.2 Effects of Proposed Action on Southwest Alaskan Communities

No concerns from the potentially affected communities regarding the availability of sea otters for subsistence uses have been identified by the Service. As the work site is within city limits, where firearm use is prohibited, the 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. Despite no conflict with subsistence use being anticipated, the Service 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 applicant will develop a POC specifying the particular steps necessary to minimize any effects the project may have on subsistence harvest.

4.1.3.3 Effects of Proposed Action on the City of Kodiak and Nearby Industries

Implementing the mitigation measures and monitoring and reporting requirements identified in the IHA may have an economic impact to Trident Seafoods Corporation. Construction activities may need to be halted, postponed, or modified to prevent impacts to sea otters. For example, if environmental conditions are such that the full extent of the shutdown zone cannot be seen by PSOs, activities will need to be delayed until conditions improve. This may lead to increased costs due to idled crews. Should construction activities need to be halted, postponed, or modified to prevent impacts to sea otters, the delays to the project will affect commercial fishing by preventing full use of the harbor until construction is completed, and delayed access to the safer facilities being constructed.

Issuance of an IHA may also have a positive economic impact for the Trident Seafoods Corporation and the City of Kodiak. Unauthorized take would be in violation of the MMPA and could result in monetary penalties. Issuance of an IHA will authorize incidental take that occurs in compliance with the IHA, and therefore limits potential MMPA violations and associated costs.

4.1.4 Evaluation of Additional Mitigation Measures and Monitoring and Reporting Requirements

If the IHA is finalized, it must specify means for effecting the least practicable impact on sea otters, their habitat, and the availability of sea otters for subsistence uses by coastal-dwelling Alaska Natives. The applicant plans to reduce the effects of its action by implementing mitigation and monitoring measures described in Sections 9 through 13 of its Request for an IHA. The following mitigation measures were included in the IHA: use of a sediment curtain to reduce turbidity, using a project design that avoids dredging or excavating below the high tide line, the establishment of multiple sizes of shutdown zones to limit take by Level A harassment, soft starts for impact driving, use of PSOs, and the delay of project activities if there is a lack of visibility. The Service has not identified any additional (i.e., not already incorporated into the

applicant's request) mitigation or monitoring measures that are practicable and would further reduce potential impacts to sea otters and their habitat.

4.1.5 Cumulative Effects

Factors that have contributed to current environmental conditions in the project area and could contribute to or influence effects to sea otters and their habitat are described here.

4.1.5.1 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, increased coastal erosion, and changes in timing and intensity of storm events (IPCC 2014). Increases in ocean temperatures and changes in sea ice extent may affect 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 otters. Southern invertebrate species may move northward with increasing temperatures; Arctic species and overall species richness may decline (Renaud *et al.* 2015). However, there is a great deal of uncertainty and variability in the predicted effects of ocean temperature and sea ice changes on benthic productivity (Post *et al.* 2013). The impacts are likely to vary throughout the sea otter's range.

Increasing ocean temperatures and changes in sea ice could allow for traditional ranges of species to expand; therefore, it is possible that the introduction of phocine distemper virus to marine mammals in the Pacific Ocean occurred via seals traveling from the Atlantic Ocean (Goldstein *et al.* 2009). Assuming this is true, 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, and it is thought that that there may be an emerging virus in Alaska sea otters that caused immunosuppression and subsequent *Streptococcus infantarius* infection; however, the Southwest Alaska stock of northern sea otters is currently stable to increasing, and it is not clear what impacts a potential emerging virus will have on the stock (USFWS 2023).

Ocean acidification is also increasing as the atmospheric concentrations of greenhouse gasses rise. Calcium-shelled organisms are prevalent in the sea otter's diet and marine organisms like clams, snails, crabs, and corals may be subject to corrosion of their calcium-based shells and skeletons. The early life stages of some bivalves and gastropods are likely to be negatively affected- particularly the broadcast spawners that have an extended pelagic larval phase. Other organisms 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, and this variability in their diet may provide some resiliency against the effects of ocean acidification.

We do not expect that changes in ocean temperature, sea ice cover, benthic productivity, pathogenic outbreaks, or ocean acidity will impact sea ofters in the specified geographical region during the 1-year period covered by the IHA.

4.1.5.2 Subsistence Harvest and Other Human-Caused Mortality

The project area is in the Kodiak Fisheries Management Area. Subsistence, personal use, recreational, and commercial fishing occur in this area of the Northern Pacific Ocean. Fisheries include salmon, herring, groundfish, and shellfish with dive fisheries including sea cucumbers, red sea urchin, and geoduck. The main fishing areas in the region are the waters surrounding Kodiak Island and adjacent coastline of the Alaska Peninsula. Potential impacts to sea otters include harassment, gear entanglement, ship strikes, reduction of prey, and displacement from important habitat.

Though there is some mortality due to fisheries entanglement in the region, there is also anecdotal evidence of intentional illegal take of sea otters (USFWS 2023). Of the 74 stranded sea otter necropsies conducted by the Service since 1997, most deaths were from natural causes such as illness. Estimates of illegal take and mortality by fisheries are likely to be biased low due to underreporting and inconsistency in data collection. However, fisheries interactions and competition for shellfish are not currently thought to be a significant threat to sea otter stocks in Alaska (USFWS 2023). Fishing is a major industry in Alaska, and as long as fish stocks are sustainable, fishing will continue to take place. Management agencies, including the National Marine Fisheries Service, the Service, and the Alaska Department of Fish and Game will continue to manage fish stocks and monitor and regulate fishing to maintain sustainable stocks and reduce interactions.

4.1.5.3 Other Incidental Take

There is currently one other active authorization for incidental take of northern sea otters in the Southwestern Alaska stock. The Service finalized an ITR for specified marine construction and pile driving in the Gulf of Alaska (88 FR 24115, April 19, 2023), including at one site within the range of the Southwest Alaska stock of northern sea otters. The take associated with these sets of specified activities each contribute minimally to potential cumulative effects to northern sea otters.

The project area for the IHA does not overlap the project area of the active authorization in the Gulf of Alaska. The ITR for the Gulf of Alaska includes pile-driving activities at Station Kodiak, which is approximately 5 miles from Kodiak Harbor. Impacts from the authorized taking associated with each project are not expected to accrue to the same sea otters or create any synergistic impacts.

Sea otters that are affected by project activities are expected to exhibit short-term behavioral changes that may result in increased energy expenditure. Increases in energy expenditure are expected to have only temporary effects on the individual, with no lasting impact to health or fitness. The monitoring and mitigation measures outlined in both the IHA and Trident's request would reduce interactions between project activities and sea otters, would help limit the severity of any interactions.

The take associated with these sets of specified activities, including those to be undertaken by

Trident, each contribute minimally to potential cumulative effects to northern sea otters and are not likely to have impacts to the Southwest Alaska northern sea otter stock. The overall cumulative take for the active and proposed authorizations (460 sea otters during the year-long period of the IHA) is approximately 0.9 percent of the Southwest Alaska stock, which represents a small number of the stock: $(460 \div 51,935) \times 100 \approx 0.9$.

Had the previous authorization not been in place, the specified activities may have been conducted without the adoption of mitigation measures required by that authorization. Authorizing incidental take allows for enforceable conservation measures and reporting that enables the Service to further understand and conserve sea otters.

4.1.5.4 Summary of Other Factors Relevant to Effects

Climate change; subsistence harvest and other human-caused removals; illegal intentional take; coastal development, and air and vessel traffic all have the potential to contribute to the cumulative impacts affecting northern sea otters. These factors are expected to combine to present even greater challenges to future management efforts. It is difficult to forecast the rate and magnitude of future population changes because of the uncertainty in the response of sea otters and their prey to the issues discussed above. The success of future management will rely in part on continued investigation into population status, trends, habitat use patterns, and effects of climate change.

4.1.5.5 Contribution of Proposed Action to Cumulative Effects

The issuance of an IHA for the applicant's specified activities is likely to result in an incremental contribution to the cumulative impacts already affecting sea otters through exclusion, displacement, or disturbance, and the associated disruption of certain biological behaviors. However, these impacts would be temporary, localized, and minor and would affect only a small fraction of the Southwest Alaska stock. The applicant's required monitoring and mitigation measures will reduce interactions between the project activities and marine mammals and will limit the severity of any interactions as well as the number of sea otters exposed to potential permanent effects.

There is one potential mechanism of interaction between effects from the factors listed above and the proposed authorization here. Data collected from carcasses of northern sea otters in western Alaska indicate that many animals killed by vessel strikes had a pathogenic infection, suggesting that sick animals may be more prone to being struck (USFWS 2020). The likelihood of a pathogenic outbreak, either novel or endemic, occurring within both the duration of the IHA and the specified geographic region is minimal. In the event of an encounter between a sick northern sea otter and a vessel, Trident's required mitigation measures will reduce the probability of vessel strike to the point where vessel strikes are not anticipated.

The Service identified no additional mechanisms through which the minor, temporary, and localized effects attributable to this proposed action could combine or interact with effects from other actions or factors to significantly affect sea otters. Furthermore, implementation of the

required monitoring and mitigation measures will not impact other biological or physical resources in the project area and will have minimal impacts to socio-economic resources. Therefore, we conclude that the issuance of incidental take for the proposed activities, as mitigated through the regulatory process, would contribute only a negligible increase over and above the effects of baseline activities currently occurring and the future activities that are reasonably likely to occur within the period covered by the IHA. A negligible incremental increase in the impacts to the Southwest Alaska northern sea otters is not expected to result in population-level effects or a significant impact to the human environment from cumulative effects of past, present, and future activities.

4.2 Alternative 2: No Action Alternative

Under the No Action alternative, the requested IHA would not be issued. The absence of an IHA would not preclude the applicant from conducting the activities. The mitigation measures imposed by the IHA for reducing the effects of activities would also not be required, and the potential impacts associated with those mitigation measures would not occur. If the applicant were to proceed without the IHA and the associated mitigation measures, the MMPA's prohibitions on the taking of marine mammals would remain in effect, and the applicant would be liable for penalties if take were to occur.

No reasonably foreseeable impacts on the human environment would result from this alternative.

CONCLUSIONS

5.1 Summary and Conclusion

To fulfill the NEPA requirements, we analyzed the reasonably foreseeable effects of issuing an IHA for sea otters from the applicant's specified activities. We also considered a no action alternative. The issuance of the IHA would affect parts of the biological and socio-economic components of the human environment but would have no effect on the physical components. In particular, the IHA affects sea otters by authorizing a limited amount of Level B harassment during the specified pile driving and marine construction activities.

We evaluated these effects in the context of other, ongoing factors that could influence potential effects, (*i.e.*, climate change, subsistence harvest and human-caused mortality, intentional take, and coastal development, including air and vessel traffic). The impacts of Level B harassment of no more than 460 sea otters for a total of 3,160 takes during pile driving and marine construction activities would be short-term and temporary. Sea otters may change their location or alter their behavior in response to project activities. These disturbances are not expected to affect the survival or reproduction of sea otters or otherwise result in or contribute to any population-level effects. The impacts of Level A harassment are expected to affect no more than 5 sea otters for a total of 30 takes during the specified project activities. This small number of sea otters potentially exposed to injurious levels of sound will not cause or contribute to population-level effects.

In light of the analysis and findings above, we find that issuance of an IHA for the nonlethal, incidental take by harassment of a small number of sea otters from Trident Seafoods Corporation's specified activities is not a major Federal action that would significantly affect the quality of the human environment, and that preparation of an EIS for the issuance of the IHA is not required by 102(2) of the NEPA or its implementing regulations. We conclude that a Finding of No Significant Impact is warranted.

CONSULTATION AND COORDINATION

6.1 Consultation Procedures

With the publication of the Proposed IHA in the *Federal Register* for public comment, the Service also requested public comments on the Draft EA (89 FR 4970). We received four comments on the Proposed IHA, all in general opposition to the project. No comments were received on the Draft EA.

It is our responsibility to communicate and work directly on a Government-to-Government basis with federally recognized Alaska Native tribes 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 13175* (January 9, 2000); (4) *Department of the Interior Secretarial 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 Interior's policies on consultation with Alaska Native tribes and organizations.

We have evaluated the potential effects of the proposed action and determined that it will not have substantial direct effects on any federally-recognized Tribes or Alaska Native Claims Settlement Act Corporations and thus we do not intend to initiate consultation with such entities. Despite no conflicts with subsistence or lands use or barriers to access to cultural or archeological resources being anticipated, the Service 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.

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

Additional details on the consultation and coordination for these specified activities can be read in Trident Seafoods Corporation's IHA Request and the Final IHA.

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